FACTORS AFFECTING
SMALL BUSINESS PARTICIPATION
IN GOVERNMENT PROCUREMENT

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PREFACE

We wish to express our gratitude for the cooperation we have obtained in the course of this project from all of the SBA personnel — procurement and technical — with whom we have been in contact. Special thanks are due to the Project Monitor, Ms. Alice K. Cullen, who has been unfailingly helpful.
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1 INTRODUCTION

1.1 ORIGIN OF PROJECT

In its "Small Business Economic Research Program Announcement,"* the Small Business Administration identified a number of objectives "of particular interest" to the Office of Economic Research, one of which was "to analyze factors which will increase participation of small business in Government procurement". It is this statement which, in a very fundamental sense, provides the basis and rationale for the project reported herein.

This should not be interpreted to mean, however, that the project depends in any way on an assumption that it is necessarily desirable to increase "small business participation" — whatever meaning may be attached to that concept. For example, an increase in small business participation — in the sense of "share of Government awards" — probably would be associated with a reduction in the participation of large business, and presumably, to that degree, there would be a question about whether the gains to the one group outweighed the losses to the other. Moreover, it is conceivable that such an increase in small business participation would not be in the interests even of "small business", since it might be accompanied by a reduction in profits, in number of small businesses, etc. Third, presumably the well-being of non-business entities (such as individual taxpayers) may be affected favorably or unfavorably by an increase or reduction in the participation of small business. In other words we interpret SBA's objective as being to learn more about the factors affecting small business participation in Government procurement, so that policies can be identified which will help small business more than they

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will hurt other groups. If the sole criterion of desirability were the amount of small business participation then the government could surely achieve improvement via a simple directive in terms of "small business set-asides".

Just as it is our position that policies which increase small business participation in Government procurement are not necessarily desirable, it is also our position that such policies are not necessarily undesirable. It seems to be necessary to make this point explicitly because there are some who evidently believe that policies designed to help small business represent an impediment to competitive processes, and that they are therefore harmful on balance. However, the belief that Government procurement processes would be generally "competitive" in any relevant sense, in the absence of such "interference", is itself an unwarranted assumption. The theoretical economic model in which there are many buyers and sellers, no one of whom can significantly affect "the market price", is one whose applicability to Federal procurement processes is highly dubious on its face, so that we see no presumption whatever against the adoption of policies which will generate an increase in small business participation.

We can put the last point somewhat differently. Even the most extreme advocates of Governmental non-intervention have conceded, since at least the time of Adam Smith, that the Government must assume responsibility for "defense", which presumably includes some procurement activities. This inevitably raises the question of what should be procured, from whom, under what conditions — which may be designated as the question of "procurement policy". It is certainly not obvious what procurement policy ought to be, although different policies can be expected to have different consequences for large and small business, respectively, and for other sectors of our society. To ask what these consequences can be expected to be does not imply approval or disapproval of
Governmental "intervention", but rather a recognition of the reality that Government procurement inevitably implies intervention, and that there is a question about what forms of procurement-related intervention are most desirable.

1.2 THE MEANING OF PARTICIPATION

A firm may "participate" in Federal procurement in various ways or to various degrees. We may classify participation as "direct" or "indirect", depending on whether the purchaser is or is not a part of the Federal establishment. In this project our concern is mainly with direct participation, rather than with policies which may have an impact upon actual or potential Federal subcontractors, or upon those who are suppliers to Federal contractors or subcontractors.*

A firm may "participate" (directly) in Federal procurement processes in the sense that it obtains an award, under which it has an obligation to the Federal government to provide goods and/or services, in return for which the government has an obligation to make payment to the firm. Those who are concerned about direct small business participation tend to use the term in this sense. However, this sort of participation is impossible if the firm fails to make "offers" to the Federal government; and, at least in principle, an increase in the number of offers by small business may generate more awards to them. It is reasonable, therefore, to view the making of offers as a form of participation, which it may be desirable for the Government to encourage (or discourage).

There is a still more basic sense in which the term "participation" may be understood. A small business may choose to devote resources (time

*A "supplier" is unlike a "subcontractor" in that the former does not incur an obligation to the Federal government as such — as the term "supplier" is used here.
and/or money) to obtaining information about the Federal government's "needs" (that is, the awards it is likely to make in the future); and, in fact, such activity is almost a logical requirement for recipients of direct awards. For example, one common form of "participation" in this sense consists of subscribing to (and reviewing) the Commerce Business Daily. A firm which does not participate in the information-gathering sense is declaring, in effect, that it has no current interest in the Government market. The most passive form that such participation may take arises when the participant waits to be approached or contacted by Government representatives, entirely on the initiative of the latter; but even in this extreme case the "participant" must be willing to listen or read.

All three degrees or concepts of participation have an obvious potential relevance to the present project, in that all three may be influenced by Government action. Note that, under some conditions, a change in procurement policy may be deemed desirable in terms of one indicator of participation, but not in terms of another. It would, for example, be difficult to take the position that it is in the interests of small business for the Government to adopt a policy which would increase the number of offers from small business without increasing the awards to small business.

Finally it may be noted that we refrain from presenting available data on the share of awards that have been made to small business, simply because we do not believe such data have any particular implications for the problem at hand. It is true that small business participation in this sense is smaller than might be anticipated on the basis of, say, the role of small business in the economy as a whole, but such an expectation is based on an implicit assumption: either the role of small business is not significantly
different as between industries (or categories of output), or the Government procures a mix of items from the various industries that is similar to the mix procured by the private sector. Since the assumption, in either form, appears quite unreasonable, an implied comparison of small business participation in the Government and private sectors, respectively, is likely to be quite misleading.

1.3 FACTORS AFFECTING PARTICIPATION

For the most part, observable "participation" should be viewed as the result of the interaction of the policies and behavior of the Government, on the one hand, and private producers on the other. An attack on the problem of participation could thus, in principle, be mounted by, or from the standpoint of, either the buyer (Government) or the sellers. For example, one could study the question, "What should the members of the private sector, or its small business segment, do in order to obtain Government awards?" Indeed, this has been, and continues to be, the subject of countless privately sponsored courses and seminars, as well as of Governmentally-conducted regional and local meetings under the sponsorship of members of the Congress.

The study reported herein, however, focuses entirely on the issue of Governmental policy or behavior when the Government acts in its capacity as a buyer. Although we recognize that, in individual instances, small businesses may sometimes behave in an inappropriate fashion, this study was never intended to provide advice to them — which is not to say that they will not obtain some useful insights from it. We seek, ultimately, to address issues of Governmental policy, so the primary audience for this study is the Government itself.

Of course, there are a great many ways in which Government policy may
affect participation; and we are not prepared to say, initially, what Governmental policies or options deserve serious scrutiny, from the standpoint of small business participation. If, for instance, the Government decided to increase the share of its procurement dollars awarded to small business, it would not be unreasonable to speculate that what is really needed are Government actions to increase the number of offers from small business, with the thought that an increase in participation in this sense would yield greater competition and more actual awards to small business. An apparently different approach might involve greater use of the "small business set-aside" concept, under which some procurements are restricted to small businesses. A third approach would require changes in the rules governing, say, "formally advertised" procurements, so that, for example, awards might be made to a bidder whose bid was not the one deemed "most advantageous to the Government." A fourth approach might involve (increased use of) various forms of assistance to small business, such as management or marketing assistance, loans, etc. We might also believe that more vigorous enforcement of anti-trust laws would contribute materially to the ability of small business to participate effectively in Government procurement. It has been widely alleged, too, that Government policies promoting high interest rates have relatively adverse effects on small business in general, and its ability to compete.

There are, then, many different types of policies which obviously might be influential; and, within each type, there are many specific forms that might be considered, each with different consequences. For example, if the Government wished to increase the numbers of offers from small business there are many things it might consider doing, ranging from more intensive (or different) advertising to providing more time to make responses to solicitations.
The assessment or evaluation of each specific policy option may involve the study of a variety of new factors, which may or may not turn out to have an impact on the outcomes of each policy. For example, if we suspected that it would be a good idea to provide more time for responding to solicitations, a complete appraisal of the idea would require us to deal with such issues as how much time is, in fact, typically permitted for response — perhaps by "type" of procurement and location of recipient; the (maximum) amount of permitted response time, by "type" of procurement, beyond which participation (response) will, in practice, be unaffected; the amount of time required for preparation of an adequate response, by type of procurement; the impact on Government procurement and operations of longer procurement lead times; and so on. In the end, after serious study, we might nevertheless conclude that there is no real promise in the idea of increasing permitted response times. In other words, the serious consideration of a broad range of policies involves the study of an enormous number of potentially influential variables — far more than we can hope to deal with within the framework of any one study, and many of which would actually be unimportant.

In these circumstances it seemed sensible, in the first instance, to delimit the scope of the project. Arbitrarily, any policy option which did not involve a modification of Governmental procurement processes was ruled out of consideration. It could be the case, for example, that there are any number of small business firms which could and would obtain (more) Governmental awards, if only they had access to low-cost capital, perhaps in the form of SBA loans, but measures of this kind are deemed to be outside of the Federal procurement area. In effect our concern is with those measures or policies that may directly affect the procurement process. However, even this restriction
does not help very much, when one considers how many attributes of the procure-
ment process may affect small business participation in some way: one has only
to review almost any Governmental solicitation document to recognize a part of
the problem of identifying influential factors. Such a document will frequently
specify what the Government wishes to buy, when and where it is to be delivered,
when and where the offer itself must be delivered and what it must contain,
how the procured items are to be packaged, the requirements for inspection and
acceptance, the basis on which payment will be made (fixed price, etc.), the
accounting practices to be followed by the successful offerer, affirmative
action requirements, methods for resolution of disputes, penalties for default,
"buy American" provisions, the need (if any) for access to classified informa-
tion, and on and on ... and on. As a second illustration, the relatively complex
process of Federal decisionmaking regarding awards may differentially affect
small business and other offerors. In short, the procurement process itself is
enormously complicated, and we simply do not know what factors are capable of
affecting small business — let alone other groups — in any significant way,
and we therefore do not know what policies to focus on.

Given this overall view of the relation between small business partici-
pation and Government procurement-related policies, we conceived of an overall
approach that would consist of at least two phases. The first phase would be
an exploratory one, designed primarily to permit the identification, based on
the application of judgment to real procurement situations, of those factors
that are capable of making an important difference to small business partici-
pation. Only in a second and/or subsequent phase would the formal evaluation of
specific, procurement policy options be addressed. Since the project reported
herein was conceived from the beginning as a first-phase effort only, it was
not anticipated that it would yield recommendations on procurement policies that ought to be adopted. While some policy changes are, in fact, recommended, the real focus of the report's conclusions or recommendations is, as planned, on the nature of promising possibilities that need to be fleshed out and more fully evaluated in a second phase.

1.4 ORGANIZATION OF THE REPORT

The remainder of this report is organized in the following simple way. In section 2, which follows, the methodology used in carrying out the study is described, with formal data collection instruments being presented as Appendix A. Section 3 describes the conclusions and findings of the study, as interpreted by the investigators; but back-up material presented in Appendixes B, C and D permits the reader to exercise independent judgments. Finally, in section 4, we present our recommendations.
2 METHODOLOGY

2.1 PROJECT AIMS

The principal aim of the present project was to identify (1) aspects of Government procurement policy or practice which are capable of making a significant change in the participation of small business in such procurement, and (2) corresponding policy options which appear to be promising. For present purposes we may think of a policy option as "promising" if it is judged that it is likely to improve small business participation without incurring other consequences that will more than offset the gain in participation. However, if such policy alternatives can be identified, their full development and/or formal evaluation is not conceived as part of the project reported herein.

2.2 GENERAL APPROACH

The basic approach may be classified as a "case study" approach, in which a "case" is a Federal procurement. For each selected case we sought to find out and understand as much as possible, with the idea that the most important factors governing small business participation might be identified judgmentally. The selection of this approach was based on our belief that, on an a priori basis, the number of plausible and potentially significant variables (or hypotheses) was very large, and that, consequently, there was no feasible analytic procedure that could be counted on to discriminate between them. In effect, this project (phase) was designed to narrow the range of factors around which promising policy options might be constructed.

What reason is there to believe that the number of plausibly significant, procurement-related, variables and/or policy options is very large? The fact is that we can identify many such variables and options, without trying
very hard — and, indeed, have already done so, to some extent, in the preceding section.

If we attempt to proceed systematically, the most obvious possibilities arise from the question of whether "Government procurement" should be considered as homogeneous. The Government procures a very broad range of goods and services, ranging from space vehicles to nuts and bolts, from massive construction projects to office rentals, from basic research to "mess attendant" services, from missiles to medical care, from automobiles to stationery. In other words Government procurement may cover perhaps the entire range of industries. We do not know, of course, that it makes any real difference to participation, or to the appropriate policies, what the Government purchases or what industry may be involved; but it is certainly a plausible hypothesis, if only in view of the fact that the relative importance of small business varies from industry to industry (for example, furniture manufacturing versus automobile manufacturing). A policy which appears desirable for the procurement of armored vehicles may appear costly and ineffective when procuring potatoes.

A second major type of difference, a priori, between procurements arises from the fact that every significant element of Government makes purchases, or has purchases made on its behalf. For example, the Departments of Commerce, Labor and Defense each make purchases, and it is certainly possible that there are systematic differences between them, in policy or practice, that affect participation. Further, there is no particular reason to believe that such large organizational entities are internally homogeneous: how similar are the Army and the Navy, or the Office of Naval Research and the Naval Supply Systems Command — or, for that matter, the various Naval Regional Procurement Offices?
Third, the Government itself differentiates various categories of procurements, such as "advertised" and "negotiated"; "fixed price", "cost plus", etc.; "definite" and "indefinite" quantity, and so on. Each such procurement category may be importantly different from every other; that is, the desirability of any proposed policy may depend upon which category is in question.

Fourth, there are a great many other attributes of specific procurements that may be significant for participation. For example, many procurements have contractual provisions relating to such matters as "allowable" costs, Governmental audit, affirmative action, "buy American", prevailing wage rates, accounting standards, subcontracting, and so on. Many solicitations formally restrict the types of offerors who are eligible for award: for example, award may be restricted to small businesses, minority-owned businesses, universities, non-profit organizations, offerors in a certain geographic area, those who are invited on the basis of "statements of qualifications", etc. Further, given the class of eligible offerors, the formal criteria of award may differ importantly from one procurement to another, in terms of the weights to be attached to such factors as cost or price, prior experience, past performance, available capacity, and other matters. A variety of other factors that may relate to particular Governmental requirements may also come into play: the time permitted for making offers, the size of the procurement, the delivery time and place requirements, the need to submit samples of products, and so on.

Each factor, or combination of factors — merely illustrated by the foregoing — may have some significant relationship to participation by small business, or may suggest Governmental policy options that are worth thinking about. For example, if we believed (a priori) that small business offerors tended to be "turned off" by "cost plus" contracting, we might think of trying
to develop policies that would have the effect of increasing the use of "time and materials" and "fixed price" awards. Alternatively, we might try to identify the sources of concern with "cost plus" contracting, (which might include, say, definitions of "allowable costs", field audit procedures, profit levels, etc.), and then attempt to develop corresponding revisions in "cost plus" contracting. It is apparent that the single area of "cost plus" policy has associated with it a very large number of potentially significant options that may deserve evaluation and which may have very different consequences for participation. To develop and evaluate the options in this one area is clearly a major undertaking.

Conversely, however, the whole "cost plus" area may be a waste of time, since it may actually be the case that small business participation is not significantly affected by the Government's choice of pricing mode. If there were some reasonable factual basis for the exercise of judgment about the significance of the "cost plus" and other areas it might be very helpful in deciding on the "promise" of the various areas as subjects of further study. It is this factual basis which an exploratory, case study approach seemed best able to provide.

2.3 PRELIMINARY FACTORS IN CASE SELECTION

If we were not prepared, to any extent, to trust our judgment about the potential or promise of the various areas, there could, of course, be no reasonable basis for the selection of cases other than a purely random drawing from the population of procurements. However, a priori considerations dictated that the selection ought not to be wholly random.
2.3.1 PROCUREMENT POPULATION

We could define "the" population, arbitrarily, as consisting of all Federal procurements ever made, and then randomly select from this population those to be followed up. However, we had some initial judgments about the problem of interest, and about what case study should mean, that influenced our notions about the basic population. Specifically, we wanted to be able to have access to relevant records and to query participants (and would-be participants) regarding the selected procurements themselves. These aims dictated that the population be defined as "recent" procurements. In addition, however, the question of the "relevance" of the cases was also present, since there was at least a possibility of significant changes in the influential factors over a long interval. Initially we arbitrarily defined "recent" to mean "awarded in the six months preceding selection", although this had to be modified eventually.

As it turned out, the concept of a "procurement" was not as simple or well-defined as we had assumed, forcing us to reconsider the meaning we had tentatively attached to "recent procurement". The problem is that a given contract may, in a variety of circumstances, have associated with it a number of distinct purchase actions — ranging from successive purchases made under indefinite quantity contracts, to the Governmental exercise of contractual options, to contractual amendments calling for a change in deliverables and funding — and the life of a contract may be quite long. In practice the population of "procurements" of interest was largely interpreted to mean "recently awarded contracts", but in a few instances cases were deliberately selected where the contract was not recent, but there had been a recent funding action associated with the contract.
2.3.2 FEDERAL AGENCIES

Aside from our *a priori* ideas about the "age" of the population of interest, we speculated that there were likely to be important differences between Federal agencies, arising from potential differences in such matters as policy, the nature of the procurements, etc. In other words, we speculated that many — although not all — of the significant factors might be correlated with the procuring agency. This implied that the cases should be drawn by first selecting agencies; and it might therefore have been argued that cases should be drawn from every agency via a formal stratification process. There were, however, a number of strong arguments against this course. First, our *a priori* ideas about "agencies" were not strong enough to define what we really meant by that concept. We expected that there would be important differences between, say, the Department of Health, Education and Welfare and the Department of Defense, but the differences within these agencies (between sub-units) could easily exceed the differences between the two Departments taken as a whole: every procurement operation could be different from every other.* In other words, it was not clear what the elements of the population of "agencies" should be.

Secondly, our resources were limited, and the cost of making arrangements with very many agencies (however defined) could easily have exceeded the total resources available. In addition, the selection of only one case from an agency would have been almost pointless (if the differences between agencies are in question), so that a large number of "agencies" would have implied a very large number of cases — again ruled out by the availability of resources. In

*In actual fact every Government official involved in the procurement process may behave differently from every other, to some degree — and probably does — but our interest is in those differences that may be "systematic."
view of these considerations it was our judgment that we ought to concentrate on a specific "procurement operation" within each, selected, major Department or organization. A procurement "operation" was conceived as a procurement organization, in a single location, with specified responsibility regarding the procurement needs of the Government. In this sense a typical major Department is served by many "procurement operations". For example, major Departments frequently have "regional" procurement activities — not necessarily meaning, however, that their customers (the users of procured goods and services) are exclusively located in particular regions. Similarly, procurement operations within a given Department may be differentiated from each other in terms of categories of items for which they may have exclusive procurement responsibility — although they may also handle other items. A "procurement operation" may also be associated with a given Governmental facility, to meet certain local needs of the facility itself.

In practice, since we had no strong initial theories about how a procurement operation should be defined for study purposes, we proceeded in a sequential, pragmatic fashion, being conscious of the need to deal with relatively small procurement entities whose internal organizational or operational characteristics were relatively homogeneous and would not introduce complexities or influences that were not central. Thus we selected three Federal agencies that could be characterized as having major procurement responsibilities, with the idea that, after gaining some overall understanding of their procurement organizations, we could confine our attention to specific operations. Our experience at this stage may be of some interest and relevance.

With the assistance of the Small Business Administration an initial point of contact was identified in each agency, and our "legitimacy" thereby
established so far as the three contacts were concerned. Thereafter our experience and procedure differed in each agency.

The First Agency

In the first agency approached, after some delays we managed to establish a meeting with the contact. We described what we wanted to do, and, as an inducement to cooperation, promised confidentiality. Aside from the issue of cooperation we felt, and still believe, that confidentiality was wholly appropriate, and for a number of reasons. First, our interest was in Federal procurement generally, not in the specific agency, and the agency was not necessarily representative in any sense. Secondly, we did not intend to study a large enough number of cases to be "representative" of the agency in any statistical sense, so there was a possibility that our findings might be misleading, or, at least, misinterpreted. Third, we were conscious of the fact that any suggestions for improvement may tend to indicate less than adequate performance by someone, and such implied criticism seemed to us a poor recompense for voluntary cooperation in making the study possible. These considerations still seem to us to be valid, even if we had not promised confidentiality to every agency and individual who provided us with information. Consequently, we shall identify agencies only by number, and individuals not at all.

Our contact in agency #1, a political appointee without any direct procurement responsibility, described the overall procurement organization in the agency, indicated the need for us to meet with the agency's senior procurement official and promised to arrange for such a meeting. After some delays this meeting was held. We described what we wanted to do, and indicated our preliminary thoughts on the selection of a procurement operation at a lower organizational level: specifically, our tentative thought was to select the procurement...
operation with the largest dollar volume of procurements, and narrow the selection
further if appropriate. Some effort was made, it seemed to us, to "steer" us in
the direction of another, organizationally parallel, lower-level procurement
operation, on the grounds that the latter had responsibility for the procurement
of items that were more appropriate for small business.* In response we pointed
out that we might learn more from situations in which awards tended not to be
made to small business, and that, in any event, the kinds of procurements he had
described would tend to be covered in another agency (which we had, in fact,
already begun to be in touch with). The question of which lower-level operation
to select was left open, and the procurement chief pointed out that we would, in
any event, need to gain the consent of the head of the operation selected. A
lower-level staff individual was designated to act for the procurement chief.

In due course we met with the staff member to review the problem of
selecting an operating procurement unit. The assigned responsibilities and
magnitude of each major procurement operation within the agency were discussed.
Interestingly, each operation was also said to have a "reputation" (among staff
personnel) not only in terms of efficiency and effectiveness, but also in terms
of the likely degree of cooperation that would be given in the study. Since the
last seemed to us a dominant consideration, we chose the only operation "known"
to be cooperative — which also happened to be one of the two that were considered
to be managed very well, and one of four that were of a very substantial magni-
tude. The staff member then helpfully offered to secure the agreement of the
selected procurement operation, and went on to suggest an approach to the selection

*Discussion revealed that the procurements generally deemed suitable for small
business consisted of those that were small in a dollar sense, and, preferably,
relatively simple technologically, with "standard" specifications. We later
consider this and related views.

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of cases within the selected procurement operation: if we would indicate what procurement characteristics were of interest for case selection purposes, he would arrange to have a computer printout of all procurements in the most recent quarter, showing each of the procurements in terms of the selected characteristics, to the extent that these were recorded. As it turned out, he repeatedly reported that there were delays attributable to computer breakdown. Eventually it was reported to us that the head of the selected procurement operation had changed his mind and would not participate, although we had not yet had contact with anyone in the selected operation.

A second substantial procurement operation,—the other with a "reputation" for good management—was then selected by us. A computer printout of recent procurement actions by that operation was obtained, and a meeting arranged with its chief to explain what we wanted and to seek his cooperation. The principal stumbling block was said to be the confidentiality of information in the procurement files, and, when pressed, two examples were cited: proprietary information submitted by offerors, and the relatively infrequent situation of "classified" procurement-file material.* Since we possessed appropriate security clearances we did not see the classification problem per se as insuperable; but it was difficult to imagine that such file information would have much relevance to the issue of small business participation. The same could also be said for such presumably "proprietary" information as overhead rates contained in offers. As a result we readily agreed that we would not seek such information.

*Lest it be thought that the reference to classified information implies a DOD procurement operation, it should be said that the three procurement operations studied represented three different departments, and that at least two of these handled classified information. However, only one was drawn from DOD.

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In retrospect it may be noteworthy, although we did not see it at the time, that the head of this procurement operation declined to provide a listing, description or definition of items of information that he would consider confidential.

Thereafter an official, two organizational levels below that of the individual who gave us his blessing, was designated to look after our needs: specifically, to provide access to a small number of "cases" that we would select from the computer run previously provided to us. As it turned out, the problem of "confidentiality" had not really been resolved; and this is discussed further in connection with case selection, in section 2.4.

The Second Agency

Although we had hoped to complete our work in one agency before going on to the next, so that our own procedures, case selection, etc., might be improved in the light of our experience, the delays and uncertainty associated with gaining access to the first agency were such that we decided to seek access to the others immediately. In actual fact the second agency approached turned out to be the first one in which cases were selected for study.

In the second agency initial steps were very much like those in the first. Through our SBA-designated contact we discussed our proposed activities with staff officials in the procurement area, obtained an understanding of the agency's overall procurement organization, and, with the concurrence of the senior official, selected its principal (largest) unit for case selection purposes. As in the first agency, the major procurement organization selected was divided into a number of suborganizations along product lines — each with its own operating head. After discussion one of these was selected by us, on the grounds that it seemed to offer the promise of the greatest diversity in
terms of procurement characteristics — products, advertised versus negotiated, and so on. Staff personnel in the agency then arranged a meeting with the deputy chief of the selected suborganization, during which we described our aims and proposed procedures. No difficulties were foreseen, and permission was given to proceed, although it may be noted that the only compilation of recent "cases" in the agency were handwritten logs relating, respectively, to the various suborganizations, containing little information which might be used to categorize or select cases.

We had in fact begun to examine some file material on selected cases when, apparently, the head of the suborganization (not his deputy from whom permission had been obtained) learned of our presence. It was promptly made clear that we were not welcome, allegedly on the grounds that we were taking up too much time of his subordinates. In actual fact we had used about one person-day of such time in retrieving selected files and in obtaining some badly-needed explanation of the items in them and their status. We then offered to restrict utilization of government personnel to actual file retrieval (which we could not do for ourselves) but this also proved to be unacceptable.

At this point we approached the head of a parallel suborganization, with a different range of procurement item responsibility. There was immediate and unconditional agreement to cooperate; and, thereafter, work in the second agency was confined to this suborganization. We observe in passing that at no time, within the second agency, was a question raised regarding the confidentiality or security classification of information in the procurement file — although we had, of course, given assurance that all information would be treated in a confidential fashion.

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The Third Agency

In the third agency contact was initiated in the same way as before, involving an initial entry point, contact with the head of procurement operations, gaining understanding of the procurement organization, and identification of the procurement operation with the largest dollar "volume" and most diverse range of procurement responsibility. The suborganization in question agreed to cooperate; we obtained a computer printout of recent procurement actions, with limited characterizations of them; and we selected a couple of cases from the list, for retrieval from the files.

The cases were, in fact, retrieved, and at this stage the problem arose: it was pointed out by the individual with the files in his arms that they contained, or might contain, "confidential" material, and that higher-level authorization would have to be obtained if we were to see them. Over the course of many weeks thereafter various possibilities were suggested by the agency, such as agency removal from the selected files of material deemed confidential, and the desirability of selecting another agency. Eventually the general problem of confidentiality was resolved in this agency by our executing an agency-proposed written commitment which bound us not to reveal confidential information, and prohibited us from obtaining any award from the agency for a specific period.

From this brief account of the problem of gaining access to Federal procurement operations it may be difficult to appreciate the time and effort required. In the light of this experience, however, it was clearly an appropriate strategy, in this exploratory effort, to confine attention to a few agencies.
2.4 SELECTION OF CASES

Once procurement operations had been identified, and access arranged, our methodology called for the selection of cases for study. However, while a "case" clearly has some relation to "procurement", it is not obvious what we intended the concept of a case study to be. We discuss this issue before considering case selection criteria and procedures.

2.4.1 THE CONCEPT OF A CASE STUDY

We can think of a procurement or procurement action as having a certain development or developmental history, with definite points in time at which it begins and ends. From the standpoint of a procurement official in what seem to be common types of procurement operations, a given procurement action can be thought of as perhaps beginning at the point in time at which the procurement organization first obtains a request (from outside the organization) to initiate a procurement, and as perhaps ending when the Government and the contractor or supplier are satisfied that the terms of the agreement have been met (or, if not satisfied, when all legal remedies have been exhausted). From this point of view a "procurement" may cover activities in which procurement personnel may have no role: for example, determination of the amount of allowable overhead costs, under a cost-type contract. As a matter of principle it seems clear that such "post-procurement activities" may have an impact on participation, since a contractor's good or bad experience with them may encourage or discourage his subsequent bidding and awards.

Similarly, there seems to be no reason to assume that the important factors affecting participation can occur only after a request for procurement action first reaches a procurement official. For example, the request may be such that it identifies an item of a specific brand, X, and, if faced with
such an absolute specification, no rational supplier of brand Y will bother to make an offer (although he may take other actions, such as entering a protest.) Thus we need to consider that, for study purposes, a procurement may "begin" before it reaches a procurement organization, even though there seems to be no definite event which marks a logical starting point. In some instances a specific procurement and/or procurement source may be implied even by Congressional appropriations (for example, funding a particular aircraft), and, if there is a meaningful starting point in such cases, it must surely be before the appropriations actions — when, for example, decisions were made about sources and funding of research and development.

An alternative and more practical way to view procurements or procurement actions is in terms of personnel or organizations with some role that may affect participation, who may be identified as follows: (1) those who initiate specific procurement requests; (2) those who process them within procurement organizations; (3) those who administer them after award; (4) those who make offers; and (5) those who do not make offers. Thus we conceived of a "case study" as involving the collection of information from or about each of these groups, with respect to a specific procurement. (In practice we collected information directly from each of these groups, with the exception of the third.) Correspondingly, we hoped to identify relevant respondents from the file information obtained in each selected procurement organization, and to collect information from them that would help us to identify and make judgments about the principal factors influencing the participation of small business.

2.4.2 CASE SELECTION CRITERIA

From an a priori standpoint there were two dominant criteria in case selection. The first criterion was that, subject to the inherent constraints COOPER AND COMPANY
of a given procurement operation, the cases should be selected to provide exposure to as broad a range of procurement situations as possible, with the hope that this would help us to identify the factors importantly affecting participation. If, for example, we believed that there was likely to be an important difference in participation between "cost-type" and "fixed-price type" procurements, we would want to ensure that both types were prominently represented, and hope that the difference would show up. The same logic would also apply to any other factor that we thought likely to be important. Unfortunately, however, as we have previously pointed out, there are a great many factors which might turn out to be important, and between which it is difficult to discriminate on an a priori basis. Thus, in saying that we wished to select a "broad range" of procurement situations we are not asserting that we had strong ideas about the factors that are important, but merely that we were prepared to recognize that certain differences between procurements, recognizable without close study of them, were more or less plausibly important.

As it happens, it turned out to be quite unnecessary to be very concerned about the precise procurement characteristics that might be used for selection, because of a second criterion or requirement. Obviously — given the difficulties of securing real cooperation — it was desirable to minimize the utilization of staff within the three agencies. Obviously, too, we were not free to remove materials from files, or even to locate them, so that any file retrieval involved work for agency staff, and, in some cases, considerable work (as discussed further below), with the result that it was not really feasible to obtain procurement files on a random basis, examine them, and then reject those that seemed to be inappropriate for study. In any event, to ask others to select "randomly" is to invite trouble of other kinds. Hence we adopted the criterion that each case must be identified specifically by us, in advance of
retrieval, on the basis of whatever information was available about it prior to
examination of the file — that is, on the basis of information contained in
agency listings of procurement actions. The operational meaning of selection
of a "broad range" of procurements is, therefore, that it was possible to deter-
mine, from a listing of procurement actions, that a selected procurement had
some characteristic that might differentiate it, in terms of participation,
from many of the other selected cases.

We have previously pointed out that the three selected procurement
operations differed from each other, to a major degree, in terms of the initially
available listings of procurement actions. At one extreme (that is, for one of
the selected agencies) it was possible to determine whether a listed (and
numbered) procurement was "advertised" or "negotiated", whether it was or was not
a "definite quantity" contract, the amount and date of award, and the identity
of the awardee. At the other extreme (for another agency) there were ways, at
least in principle,* to determine from the listing:

- award to small disadvantaged business concern: (1) yes, (2) no,
because no known source; (3) no, because (a) not solicited, (b)
solicited but did not bid, (c) bid was not low, or (d) bid rejected
for other reasons
- the identity of the awardee, and the city and state of performance

*We say "in principle" simply to remind the reader that (1) for at least some
characteristics the classification is a matter of judgment, (2) the errors, if
any, in the computer listing were not checked by us, although some were obvious,
and (3) the fact that a characteristic is listed does not necessarily imply that
the list contains significant numbers in more than one category. As an example
of the last, the listing shows "foreign military sales", but none were identi-
fied on our list. As an example of "judgment" (in our opinion), we cite the
case we selected from the listing that was described therein as a "competitive"
award, and which turned out to involve an invitation to bid issued to only two
firms pre-selected by the Government — one of which responded that it would
not bid.
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- whether the procurement was or was not multi-year
- whether the award was subject to the following statutory requirements:
  (1) Walsh-Healey Act, Manufacturer; (2) Walsh-Healey Act, Regular Dealer; (3) Service Contract Act; (4) Davis-Bacon Act; or (5) none of these
- the "labor surplus area" characteristics of the award, permitting the following categories of "preference": (1) total labor-surplus-area set-aside; (2) total labor-surplus-small-business set-aside; (3) combined small-business and partial labor-surplus-area set-aside; (4) labor-surplus-area-tie-bid; (5) partial labor-surplus-area set-aside; or (6) no labor-surplus-area preference
- the award's woman-owned business status (yes, no, or not certified)
- whether the award was or was not for "consultant type services"
- a (very brief) description of the commodity or service to be provided to the Government*
- an identification of the "coordinated procurement" status of the award, with the following options: (1) single department procurement; (2) GSA schedule; (3) Defense Logistics Agency; (4) procurement agreement; (5) other Federal Agencies; (6) Small Business Administration — 8A; (7) outside U.S.; or (8) other.
- whether or not the proposed procurement was "synopsized"; and, if not, which of ten categories of "exceptions" justified the failure to synopsize: (1) security classification; (2) procurements of perishables; (3) utility services with predetermined supplier; (4) emergencies in which there is little time for bid preparation; (5) an order

*For example, "maintenance — repair of equipment," "management services/ systems engineering".

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under an existing contract; (6) procurements from another Government department or mandatory source; (7) procurements of services from educational institutions; (8) procurements restricted to foreign sources; (9) procurements for which advance publicity is not appropriate or reasonable; or (10) estimated award under $10,000.

- the kind of procurement action: (1) initial letter contract; (2) definitive contract superseding letter contract; (3) definitive contract (including notice of award); (4) order under contract; (5) contract modification — additional work; (6) contract modification — funding action; (7) contract modification — change order; or (8) contract modification — termination or cancellation.

- the award process or type: (1) two-step formal advertising; (2) other formal advertising; (3) small business restricted advertising; (4) other negotiated; (5) other total small business set-aside; (6) intra-governmental; or (7) foreign military sales.

- the type of awardee: (1) large business; (2) small business; (3) work outside U.S.; (4) non-profit, educational; (5) non-profit, hospital; (6) non-profit, other; or (7) work in U.S. by overseas firm

- reason for award to large, rather than small, business: small business (1) was not solicited; (2) was solicited but did not bid; (3) bid was not low; or (4) bid was not accepted for other reasons

- reason for negotiated (rather than formally advertised) award: (1) national emergency, justifying (a) labor surplus area set-aside; (b) unilateral small business set-aside, (c) disaster area set-aside, or (d) balance-of-payments program; (2) public exigency not permitting the delays of formal advertising; (3) purchase of $10,000 or less; (4) personal or professional services; (5) services of educational
institutions; (6) purchases outside the U.S.; (7) medicines or medical supplies; (8) property purchased for resale; (9) subsistence supplies; (10) research, developmental or experimental work; (11) technical equipment requiring standardization; (12) unreasonable bid prices after advertising; (13) purchases not to be publicly disclosed; (14) impracticable to secure competition by formal advertising, because (a) only one (sole) source, (b) contractor owns patents, controls raw materials, etc., (c) no responsible and responsive bids received via formal advertising, (d) quantitative requirements not covered by bids received via formal advertising, (e) utility services, (f) training film, manuscripts, etc., (g) technical, non-personal services relating to equipment of a highly technical or specialized nature, (h) studies or surveys, (i) maintenance, repair, alteration, inspection, etc., where exact nature or amount of work is not known, (j) stevedoring, terminal, etc., services which have rates established by law, or which are too complex for formal advertising, (k) commercial transportation, except common carrier services, (l) services related to perishables, such as protective storage, where advertising is impracticable, (m) impossible to draft adequately detailed description of requirements, (n) replacement components for equipment specially designed by the manufacturer, when available data does not ensure performance, or (o) construction work with current contractors at site, where site or size of procurement makes an additional contractor impracticable; or (15) otherwise authorized by law, such as the Transportation Act or Small Business Act.

- extent of competition in negotiated awards: (1) competitive — (a) price, (b) design or technical; (2) non-competitive follow-on —

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(a) after price competition, (b) after design or technical competition; (3) other non-competitive; (4) catalog or market price; or (4) miscellaneous non-applicable

- certified cost or pricing data: (1) required; or (2) not required
- cost accounting standards clause: (1) subject to clause; or (2) not subject to clause
- contract type: (1) firm fixed price; (2) fixed price, economic price adjustment; (3) fixed price incentive — (a) with performance incentive or (b) without performance incentive; (4) fixed price redetermination; (5) cost-plus-award-fee; (6) cost; (7) cost-sharing; (8) cost-plus-fixed-fee; (9) cost-plus-incentive fee — (a) with performance incentive, or (b) without performance incentive; (10) time and materials; or (11) labor hour
- subcontracting program plan clause: (1) none; (2) includes only negotiated clause; (3) both negotiated and incentive clauses; (4) formally advertised clauses
- date of procurement action
- estimated date of completion
- dollar total of procurement action

On the face of it, the amount of information available from the last agency's listing of procurement actions was enormous; and, indeed, incidentally serves to give substance to our a priori belief in the potential relevance of a very large number of factors for the problem of participation. For example, thirteen different "contract types" are identifiable, by the agency's classification system, so it may appear that we could have selected 13 categories of cases based on this variable alone. Moreover, there are also many — thousands — of combinations of the values of the listed variables, giving rise to an
extremely large number of bases of case selection within the procurement operation in question. The reality was quite different, however, since the listing of procurement actions actually contained only a small fraction of the categories available for use. For example, in this procurement operation it was extremely difficult to find an award classified as formally advertised (rather than negotiated) in a listing covering an entire year's operations.* In other words, based on the examination of the listing of actions, there were relatively few categories of procurements which might plausibly be expected to illustrate significant differences in the factors affecting participation.

In practice, to the extent that information available on listings of procurement actions made it possible, most cases were selected so that

- some were awards to large business, some to small
- some formally advertised, small business set-aside, some "negotiated"
- some fixed price, some cost-type
- a broad range of dollar awards were represented
- the items procured ranged from relatively routine services and primitive hardware items to high-technology, complex equipment systems and research and development
- some awards were "definite quantity" and some not
- some were routine stock replenishments and some not

In addition, an effort was made to solicit at least one procurement action case

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*We had initially intended to confine ourselves (in all agencies) to procurement actions taken in the latest quarter, or perhaps two quarters. However, this tended to provide so limited an exposure to a "broad range" of procurement actions, that we soon extended our interest to a full year — meaning that the procurement request had sometimes been initiated two or more years before. Lest the reader attribute the phenomenon under discussion to the selection of a "small" procurement operation, we point out that the annual procurement volume in question was about a billion dollars, involving many hundreds of procurement actions.
in each of the following categories:

- award to a non-profit institution
- sole source award
- award under a very old contract
- competitive award without synopsis (in the Commerce Business Daily)

2.4.3 GENERAL CASE SELECTION EXPERIENCE

Once a procurement action was selected from a list our intent was to ask for, and study (but not remove or copy) the corresponding "procurement file". Our declared interest was always simply to learn from the file as much as possible about how and why the procurement action came out as it did. For example, where did the specifications come from? Why was it set aside for small business (or not set aside)? Why was it, or was it not, "cost plus"? Who was invited to bid, and why? Who actually bid and why? Who was the successful offeror and why? We also wanted to identify people to be contacted. However, with certain obvious exceptions (such as the bidders' mailing list), we did not know what file documents, if any, might throw light on these questions.

In the first procurement operation approached we selected a few procurement items from the list, and asked the designated supervisor for the corresponding files. After some hours we inquired about the status of the requested files, and were informed by the supervisor that he had not been given authorization to provide us with the files, because of the existence of confidential information. When it was pointed out that we had already reached agreement with the chief of the operation that we neither wanted nor needed such information, in general, and that we would be happy to see the file without it, the response was that the procurement staff could not go through every document in the file and determine whether the information it contained was or was not
"confidential." However, if we would identify the specific material we wanted from each file, a determination would be made about its availability to us. Of course, given the nature of our mission this was a serious blow, since an important part of our aim was to judge what was significant after reviewing the "total" situation, when we did not know what "total" meant, or even what was or should be in the file. Based on conversations with him, our belief was and is that the supervisor in question was deliberately obstructive — whatever the true attitudes of his superiors — at least in part because of his hostility to SBA, and for reasons independent of the present project. We do not wish to deny, however, the grain of truth in his position. Some procurement files contain many hundreds or thousands of pages, very poorly organized (if at all), and, if it is assumed that confidential information may appear on any page, then it may be a very substantial undertaking to determine whether it contains poorly-defined or undefined "confidential" information.

Despite this set-back we thought it best to continue, and asked for items which we felt morally certain were in each file and were needed to understand the procurement action — the solicitation documents, bidders' mailing lists, contracts, the source of the procurement request, and so on. Even this proved to be a severe problem. It transpired that the supervisor had some previously unstated concerns, which led him to the position that we could not study file material, but only copies of file material. It was claimed that it took substantial clerical effort to search the files for the desired materials, so the requests had to take their place in the queue for such clerical tasks; and then, once retrieved by the clerk, the process of creating facsimiles involved another queue. Thus, several days had to elapse between a request for specific case material and the receipt of copies. In a number of instances,
basic material allegedly could not be located, such as the initiating request for procurement, or even the solicitation documents.

In the other procurement operations, in contrast, once agreement on access had been reached, no deliberate impediments were placed in our way. Once procurement actions were identified by us the corresponding files — not copies — were promptly made available for study. Moreover, we had no reason to believe that any part of the files were withheld (and would, in fact, find it hard to believe). However, the files were frequently poorly organized, or disorganized, and pertinent items were often missing (could not be found with reasonable effort). For example, given the methodology we had in mind it was important to us to know the names and addresses on the bidders' mailing list,* who had actually bid, and so on; but this basic information was not infrequently unavailable.

Lest some sort of conspiracy be suspected by the reader in these cases, the common disorganization of files would, we believe, suggest otherwise. Further, there are ready and plausible explanations for the absence of at least some specific items. Consider, for example, the hand list. Procurement personnel tend to generate at least a portion of this list on the basis of experience

*To speak of "the" bidders' mailing list is, in most cases, an oversimplification. Typically, it appears, a "hand" list is made up from such sources as names suggested by the "technical" people, and/or names of offerors on past procurements deemed similar by procurement personnel, and/or names proposed by a small business specialist. In addition, a far larger number may be selected through the agency's automated procedures for generating a mailing list from information in central files. Finally, of course, solicitations are mailed in response to specific requests arising from the Commerce Business Daily or other public notices. While this may be viewed as typical, there may actually be no mailing list at all — as in a sole source, or a primitive one consisting (as illustrated earlier) entirely of a hand list with precisely two names. The general practical significance of these distinctions is not obvious, but it was sometimes true that a systematic portion of the overall list, such as the hand list, was missing from the file.
in "similar" procurements. Hence an early step in the generation of such a list is to go to the file of a past similar procurement, and review its hand list (which may also have been annotated to show who bid). It is not difficult to accept the hypothesis that a "review" of this past hand list often means that it is physically transformed into a new hand list for a subsequent procurement, and is never returned to the original file. As a second illustration, the absence of so basic a document as the solicitation can be accounted for in a number of similar ways: it may be obtained by procurement personnel as a "model" for a subsequent procurement, and never returned to the original file; or there may be a number of related procurements, all based on the same solicitation, only one of which contains a copy of the solicitation document.

It may be appropriate to point out here that our initial plan had been to treat each of the three procurement offices in the same way, and, specifically, to study about the same number of cases from each. However, from a broad judgmental standpoint it became clear in the course of study that two of the three provided similar case experience (in a sense to be discussed later), and, as a result, we selected about as many cases from the third agency as from the other two combined. This judgment was reinforced when we discovered that there was an enormous amount of overlap between bidders — and mailing lists — for the two "similar" operations, since we did not wish to approach a given firm with respect to more than one procurement. It is perhaps fortunate that the agency that, in practice, made it most difficult to obtain information was one of the two from which a smaller number of cases were selected.

2.4.4 THE SPECIFIC CASES SELECTED

Without having thought through all of its implications we had assumed that a major part of this report would be devoted to comprehensive
description and discussion of specific cases, partly so that the observational basis of our judgments would be clear. In practice, however, this seems to be infeasible without violating some aspect of our assurance of confidentiality. For example, to describe the items procured would be, in many instances, to identify the agency involved, and even a particular procurement operation. As a hypothetical and perhaps extreme illustration, if we were to say that a case dealt with the procurement of bombers, few would be in doubt about the agency involved, while those with a little more information might even identify the specific procurement operation. Similarly, a study described as dealing with government loans to small business would have the same result. Even the identity of individual government officials might readily be discovered, effectively robbing them of the confidentiality promised.

Further, there are many situations in which, while the nature of any one procurement does not point unequivocally to a particular agency, a combination of specific procurements may well tell the story. For example, ten procurements involving the same subject, such as "law enforcement", "highway safety", "environment", or "mining", will certainly strongly suggest a particular agency, even though one project in any such area might have been sponsored elsewhere.

Despite these considerations it may be important to convey some flavor of the cases selected, especially since some may have features that are of interest to the reader. Accordingly, it was decided to provide brief notes on each case, to the extent that this seems consistent with our commitment to confidentiality. In many cases this means that highly specific identification of the items being procured is not feasible, although the general nature of the procurement (e.g., "services", "hardware system") is indicated.
It is important to note that many more procurements were selected from the files than were actually used for complete study; that is, some did not involve any effort on our part to contact governmental and/or non-governmental personnel regarding them. There were a variety of reasons for this. If, for example, the Government had decided that it needed 10 more units of system X, and had approached its manufacturer, company Y, to procure them, there was no point in asking company Z about its participation. At other times the file information obtained was so thin that it seemed pointless: for example, we could not determine, at a meaningful level, the nature of the item procured, so that, if recipients of the solicitation were unidentified, we could not approach potential bidders (selected by us) and describe the item. In other procurements selected from the file there was virtually total duplication, between cases, of the respondents who might be involved. Some had origins so far back in time that only the contractor seemed likely to have any knowledge of it. Later we present quantitative data that are based on bidder and non-bidder responses in connection with 35 cases, but the actual number about which we obtained some file information was roughly double that number. Nearly all of the latter are covered in Appendix B, although a few have been omitted because available information was sometimes so sparse.

2.5 CASE STUDY PROCEDURES

Our original intent, once procurement files had been obtained, was to proceed as follows for each case:

- Study the procurement file, and obtain an understanding of each document and the policies/procedures associated therewith — if necessary, by interviewing the relevant procurement specialist.
- Identify the sources of the procurement request, in an organizational and individual sense, and seek to obtain an understanding
from these individuals of the rationale for the request.

- Identify, and conduct interviews with, a number of the bidders on the procurement, both small and large business.
- Identify, and conduct interviews with, a number of the non-bidders on the procurement, including both large and small business. The non-bidders were also recognized as potentially distinguishable in terms of whether they were or were not aware of the solicitation.

We believed that by conducting relatively unstructured, open-ended interviews — primarily, of course, with business — and focusing on the factors affecting participation, we might gain some insight into what was and was not important.

It soon became apparent, however, that the primary mode of data collection, once file information had been obtained, would have to be modified, and for a number of interrelated reasons. First, in thinking abstractly about the problem, we had subconsciously assumed a world in which the typical "case" is one in which there are many bidders, so that it would be possible for us to choose those to be interviewed partially on the basis of locational convenience; that is, we assumed that the cost of travel, in time and money, could be kept low. In fact, however, the luxury of choosing bidders to be interviewed was not really available, because the common situation was one in which there were few bidders — and these typically in widely separated locations.

Further, we had not adequately considered the problems of identifying appropriate individuals within the businesses to be approached, of securing approval, and of arranging appointments; and since appointments must be mutually acceptable, the idea that travel could typically be arranged to deal with many interviewees on the same trip was implausible. The costs
of personal interview would inevitably be high. It also developed that many of the procurements had "originated" in locations far removed from the three selected procurement operations, and similar problems of identifying individuals, securing approval, making appointments, and travel cost, would arise in interviewing these Government personnel.

Moreover, when we looked more closely at the problem of securing agreement for interview, we recognized that it might be necessary to say a good deal more about our desires and intentions than that we wished to discuss participation and non-participation. As a practical matter, further, we would have to ensure that certain topics were covered. Also, the problem of comparing responses in some systematic way — as between large and small firms, for example — would be enormously eased if we developed a relatively structured approach to data collection. Finally, when it became clear that, for budgetary reasons, the approach could not be implemented in general on an interview basis, we were forced to develop formal questionnaires for data collection — questionnaires that were used, by mail, for all information-gathering from non-governmental organizations. Personal, unstructured, interviews were employed for much of the information obtained from government sources, although a formal mail questionnaire was also developed for that purpose, and, to some extent, used (with no positive result). Since the number of governmental interviews was relatively small, and, for a variety of practical reasons, did not pertain to every case studied, the quantitative information to be presented in this report is based entirely on the use of a questionnaire sent to a non-governmental mailing list. However, important qualitative insights were obtained from interviews with government personnel.
2.5.1 NON-GOVERNMENTAL MAILING LIST DEVELOPMENT

Some selected cases were such that no mailing list was in fact developed. This tended to occur when there was information missing from the file, particularly with respect to the identity of those (if any) who were sent the solicitation, or when there appeared to be very great overlap between the lists that would have had to be employed for different cases,* or when the procurement action had been initiated so far back in time that "organizational memory" of the procurement could be assumed to be unlikely, especially for a non-bidder. In a couple of cases awards were made in which even the work to be done could not be ascertained because of its security classification, so that no appropriate questionnaire could be developed, and therefore no mailing list could be used. In another it was clear that only one firm could conceivably have done the job.

Leaving aside the cases in which no mailing list was developed, our general procedure was as follows, to the extent permitted by the case file:

- Obtain names and addresses of all bidders
- Obtain names and addresses of all non-bidders on the handlist
- Obtain names and addresses of solicitation recipients selected from
  - the automated mailing list
  - those requesting the specific solicitation

It may be noted that no one of these procedures was possible for every case, that is, based on the file sometimes we did not know who the bidders were,

*The most extreme version of this occurred when two procurement actions were selected for study that turned out to represent awards to different organizations made on the basis of the same solicitation. It may be observed that procurement files and listings seem to be organized by contract number, rather than by solicitation, so there is no automatic way to be aware that two or more awards may have a common, procurement origin. (This is one of the circumstances under which a solicitation may be absent from the file for one award, and perhaps present for the other.)
sometimes there was no hand list, sometimes no automated mailing list, and sometimes no record of those requesting the solicitation. (When available, the latter was obviously unsystematic.)

It should also be noted that an automated mailing list was, for some cases, probably never employed (accounting for its absence from the file), while for others it contained many hundreds of names — making some selection process essential for us. In conducting this selection our first concern was to eliminate any name known to be on one of the bidders' or hand lists we obtained. We then sought to select a mix of firms on the basis of (1) whether we knew the name — on the assumption that this would turn out to be highly correlated with firm size, since we wanted a mix; (2) the firm's location — we sought geographic dispersion; and (3) whether the firm name appeared consistent with the subject of the solicitation — we sought relevant response.*

There was one other category of non-governmental addressee about whom we were initially quite concerned, namely, those who did not appear on any of the lists so far described. It did not seem impossible to us that there might be many firms — especially small ones — who had been totally "turned off" by some aspects of government procurement, and whose names no longer appeared on mailing lists. Nor did it seem impossible that there might be many firms — especially small ones — who, although perhaps interested in the possibility of participation, simply had no idea how to go about it: for example, they might not have heard even of the Commerce Business Daily, nor have any understanding of the solicitation/mailing list procedures of the

*As a hypothetical, but not unrealistic illustration, if a solicitation dealt with, say, the maintenance and repair of office equipment, and the automated list generated a firm identified as "The XYZ Office Maintenance and Cleaning Service" we would not have been inclined to choose it for our mailing list.
government. To identify such firms we sought to select names from directories (such as Thomas' Register, Standard and Poor's) which did not appear to be on our available lists, but which, nevertheless, appeared from directory information as if they might be potential suppliers of the items to be procured. (Later we discovered that this was, in some procurement operations, a more or less standard procedure used by procurement officials in an effort to generate more interest — more competition — in government procurement when, on the basis of experience, few bids were anticipated.)

Directory sources were tried out in the initial cases, but the results were so unpromising that we discontinued them, and for two reasons. First, the response rate was so low from this group — about 1% in a few hundred — that the effort appeared both pointless and too costly. Secondly, the few respondents failed to provide information beyond the fact that, indeed, they had not done business with the government and did not plan to. In such circumstances, we had sought some sort of behavioral explanation, but did not obtain it. This experience seems to suggest that there may be very few firms who have any interest in government procurement who have not had some relevant, even if minimal, contact with the procurement process; for example, via a request to be put on a mailing list.

In a few selected cases special procedures were adopted for mailing list development. One of the unclassified awards that was made on a sole source basis was selected, and, primarily as a primitive test of the appropriateness of "sole source", some names were selected from an automated mailing list generated by the same agency for another procurement, and this constituted the mailing list used. In the case of an unclassified and unsynopsized solicitation in which only one bid was actually obtained, out of
two firms solicited, a similar procedure was used. In another, where the bidders each consisted of a lead firm supported by many subcontractors, the names of subcontractors were included on the mailing list.

At a general level we can say that virtually all (about 99%) of the responses tabulated here came from respondents whose names were on mailing lists obtained from the government's own files. Of necessity, therefore, we shall have nothing to say about the participation of firms who may have had no prior procurement-related contact with the government.

2.5.2 GOVERNMENTAL MAILING LIST DEVELOPMENT

For formal completeness — although it has no practical significance — we point out that, in about a dozen of the cases dealt with, an effort was made to obtain information by mail (from a single source in each case) that could be identified from the file as representing the point of origin of the request for procurement. However, those were organizational rather than individual identifications, and, in some cases, probably represented an intermediate echelon in the approval chain rather than "the" point of origin of the request. In any event no responses were obtained by this process, although we consider that very little was lost, since (a) we believe that important insights were obtained through personal interview in other cases, and (b) the mail instrument was not well suited to the development of the kind of information obtainable through discussion and the give and take arising from intellectual challenge.

It may also be pointed out here that, in some cases, no effort was made to contact the point of origin of a request for procurement, either by mail or in person. In these cases we learned that the "point of origin" was really a computer which generated a quantitative requirement for a specific
item carried in stock, in accordance with an existing inventory policy. In this situation the only specifications-related government policy that could be questioned, prior to procurement operations, was the inventory policy itself. We do not suggest that inventory policy is beyond question, but it has been the subject of much other study, and its general rationale adequately documented in the literature. That rationale has, of course, no relation to the impact of alternative inventory policies on small business or other participation.

2.5.3 QUESTIONNAIRE DEVELOPMENT

Because the study was built around specific, selected, procurements, the approach to each, corresponding, mailing list had to make some reference to the procurement that was in question. In other words we wanted information relating to a specific procurement for each case mailing list. One way to have approached the questionnaire problem would have been to identify the procurement in a cover letter. However, there were three significant arguments against this approach, of which the first was that the cover letter also had to serve other purposes — explaining what we were up to, seeking cooperation, and so on — so the cover material would have been undesirably long. The second argument was that we also wanted to ask questions about the respondent's experience with Federal procurements in general, and we foresaw that this would create confusion among respondents if the questionnaire itself did not clearly differentiate the two general areas of questioning. Third, since respondents were not required to identify themselves, it might not be possible to associate a response (questionnaire) with the specific procurement to which it related, unless the questionnaire itself identified the case. Hence we decided that at least one section of the questionnaire had to be different from case to case, even though the questions might formally be comparable:
for example, "Did you obtain solicitation X?"

Moreover, the approach to each case mailing list could be different to the extent that our initial information differed from case to case. For example, for most— but not all— cases we knew who the bidders were, so that it was unnecessary and probably undesirable to ask certain questions (such as the one just used in illustration), again suggesting different questionnaires for different cases. Similarly, we knew, initially, that there were a few cases in which there was either no formal solicitation or the solicitation was restricted to a few identified firms; so that, for other firms, the answer to the same illustrative question was known to be negative.

Some of these considerations appeared to be potentially important in obtaining the maximum possible response rate. Obviously response was totally voluntary, and there was no particular inducement we could offer. Therefore, the idea of making the questionnaire as easy to answer as possible—in part by not asking questions to which we already had answers—could not be ignored, and we did, in fact, use different versions of the questionnaire, principally by substituting "not applicable" for questions on which we already had information. (There is, however, no evidence that this made any significant difference to response.)

Further, we also thought it might be desirable to experiment, again with the idea of improving response, with the cover materials. Hence we developed some letters, for use in situations where we knew the addressee's bidding status for the case in question, that revealed our knowledge, with the idea of impressing upon the addressee that he was not drawn from a telephone book, and that his response really mattered. Other letters did not
use this knowledge, even when we had it. Still others merely asked for cooperation, leaving all explanation to the included materials. (There is, however, no evidence that this made any significant difference to response).

There were, even aside from the information collected about each case, a few deliberate constants in our approach. We knew that it might be important to establish that our work was being conducted under Government auspices, and, accordingly, each letter was accompanied by a copy of a letter from SBA's Project Monitor. Further, in every instance we stressed our desire to have responses from both large and small businesses, with the idea that the difference might be revealing.

To develop the basic instrument for collection of data from actual and potential participants we first sought to make a list of the things we wanted to know. However, this list tended to generate a few very broad and open-ended questions, such as "Why did your organization not bid?" This type of question could be answered, and perhaps quite meaningfully, at many different levels. Hence we decided to develop lists of items that might be considered relevant by respondents in answering such questions; that is, we sought to develop questions whose answers were in "closed" rather than "open" form — permitting, for example, an answer such as "true" or "false". Of course, the list of specific questions could be very long indeed, corresponding to a myriad potentially significant factors affecting participation: for example, we could have listed each clause typically involved in certain categories of contracts, and asked a question about it. Had we followed this strategy the questionnaire would have been so long that any response would have been discouraged.
To deal with this problem two devices were adopted. First, we deliberately formulated some questions so that they dealt with relatively broad areas, rather than narrow ones. For example, we sought to elicit reactions to the specifications in each solicitation; but rather than ask about "specifications" in general, or, on the other hand, about every dimension of the specifications, we adopted the device of treating "specifications" as if they had a few broadly different components — partly to remind the respondent that we had an interest in all aspects of specifications. Secondly, we frequently adopted the device of inviting the respondent to respond more concretely or specifically (in an open-ended fashion), or to add wholly new factors which we might have omitted (by oversight or otherwise).

In any event, after many iterations we produced a preliminary data collection instrument that was in three conceptually distinct parts. The first dealt with the respondent's perceptions of, or experience with, a selected procurement or case; the second with his perceptions of, or experience with, Federal procurement in general; and the third with some salient characteristics of the respondent unrelated to procurement (such as respondent size). This preliminary version was then subjected to criticism by colleagues and Government personnel, and while the criticism was not always accepted, the result was certainly an improvement. Later, we met, on an individual basis, with a few small businessmen in the area, after explaining that we wanted their help in questionnaire testing, and asked them to complete the questionnaire in our presence. There appeared to be no significant problem except that one or two of the questions pertained to matters of which a particular respondent might have no knowledge. In questions where there seemed to be any possibility of this we then tried to ensure that the instructions would always permit the respondent to have the explicit option
of expressing no opinion.

The version of the questionnaire thus developed was tried out using the mailing lists developed for two of the cases. Study of the responses made it clear that, while respondents were answering questions in an apparently satisfactory way, they were also answering questions in one or two cases which there was no need for them to answer, primarily because we had failed to direct them to omit certain questions under certain conditions. For example, after telling us that they were not aware that the specified solicitation had been issued, some chose to respond to the next question — on how they had become aware — by writing in "not applicable." After this experience, while we did not feel the need to change any question, we did modify the instructions so as to be more explicit about the conditions under which parts of the questionnaire should not be answered.

For the first two cases, also, an effort was made to "follow up" with non-respondents to our initial mailings. This generally consisted of a copy of the original cover letter, on which was superimposed a hand-written note from the signer of the letter, asking for response. This procedure did result in additional responses (not obviously different from the first set) but the proportion of non-respondents was still very high, and, in later cases, this approach was not pursued. Since, in any case, no claim of statistical "representativeness" of the results could be made via this exploratory case study, there did not seem to be anything to be gained by concentrating on the original mailings — even if there had been some way to improve the response rate very much. As an alternate, our strategy became one of sending out larger initial mailings, so as to obtain a non-trivial number of total responses without follow-up of non-respondents. (The significance of non-
response is discussed later in this report.)

No comparable development was undertaken for the simple, mail questionnaire that was (unsuccessfully) used to seek information from a handful of government "originators" of some of the procurement requests in the selected cases.

2.6 THE INSTRUMENTS EMPLOYED

In Appendix A we present facsimile versions of the formal data collection instruments actually employed, which may be identified as follows:

- Figures 1A, 1B, 1C and 1D show the cover letters used, under varying conditions, in communicating with the bidders and non-bidders on our mailing list. It is our judgment that they had no significant differential impact.

- Figure 2 shows the letter, from the Government's Project Monitor, that was included with every cover letter and questionnaire.

- Figure 3 shows a typical version of the questionnaire sent to both bidders and non-bidders. (In a few cases, where we knew the answers, some questions, primarily on the first page, were replaced by the words "Not applicable to bidders".) This is a "typical" version in the sense that, while the first paragraph of Part I applies only to a particular case, everything else about the questionnaire was the same for other cases. In the latter, there was, in the first paragraph of Part I, a comparable level of description of the procurement in question.

- Figure 4 shows the first page of the questionnaire used in connection with two procurements for which no formal solicitation was available (each with only one bidder), and one of which was literally
sole source. The remaining pages of the questionnaire were the same as in Figure 3. Respondents in these two cases were treated, for computer tabulation purposes, as having provided answers that were "not applicable" to the standard first page questions. In other words Figure 4 responses were reviewed by project staff, but these questions were not included in computer runs.

- Figure 5 shows the questionnaire used as a basis for informal discussion with governmental initiators of procurement requests. This is also the questionnaire employed in some cases (unsuccessfully) to seek information by mail from similar sources. Note that only one response was sought for each case.
3 FINDINGS AND CONCLUSIONS

3.1 INTRODUCTION

There are many ways in which our findings might be organized and presented, the most appropriate no doubt being dependent on what is assumed about the interests and backgrounds of readers. However, given the nature and methodology of the project, the conclusions which are drawn from it are bound to be judgmental to a substantial degree, even where they may appear to be of a "statistical" nature. Consequently, it was decided to treat this section as being essentially a summary of our judgments, and to present supporting data and analyses in the form of appendixes.

The fact that, in practice, even the statistical findings are judgmental is easily illustrated. Suppose that small firms responding to our questionnaire indicate, by a margin of 60-40, that "anticipated business conditions" is an important factor influencing their bidding decisions, while large firms are equally divided. We can apply standard statistical tests, that take account of sample sizes, to determine whether the difference between large and small business responses should be regarded as "significant", or whether, on the contrary, we should view the difference as being due to chance. However, we may reach an incorrect conclusion no matter how the statistical tests may be employed; and any conclusion that may be reached will be dependent on the risks of error one is willing to assume—which is clearly a matter of "judgment". In other words, we cannot even assert that our data show a real difference between large and small firms without interjecting our own views.

Moreover, in practice such judgments cannot be independent of a variety of other factors. For example, one may judge that non-response is or is not a serious problem; or that a result is or is not consistent with other
measures or observations; or even that it tends to confirm or reject hypotheses in which there is strong a priori belief. As an example of the latter, if responses and statistical tests thereof tended to show that large businesses were more favorably disposed than small businesses to Governmental imposition of set-asides, it would surely not be prudent to accept the conclusion without further investigation.

In order to present our findings and conclusions we have organized this section as follows. In the immediately following subsection we provide an overview of the sources and amounts of information on which we shall rely. We then proceed as if "participation" were a bilateral process — involving "Government" and "potential offerors", respectively — with three distinct phases, namely, solicitation, bidding and award, each of which is taken up in succeeding subsections.

3.2 INFORMATION AND ITS SOURCES

In all, in the three agencies studied, we sought files in 68 "cases", and, in 67 of these we actually obtained some file materials. However, in only 65 cases was the information substantial enough to warrant description. We should note that we do not suspect anything sinister or "different" about the three missing cases, except that there were administrative or practical reasons for us not to pursue them very vigorously.*

*Of the three, two were not pursued because it was said that the procurement files themselves contained classified information, and that it would have been a burden to the agency involved to ensure that such information was removed. (It might have been difficult to substantiate our "need to know".) However, some other cases we dealt with did involve classified projects — where the information we sought was unclassified — and we know of no reason to suspect that, in this study, the security classification of the procurement is a significant factor. The third missing case was said to involve an active "dispute", with the file being in the office of counsel. Since we saw other (closed) cases involving disputes, we do not think it likely that the omitted case would have provided new insights.
Since, as indicated earlier, a single file may contain hundreds, or even thousands, of pages, there is no way the cases could be described fully in this report. The requirements of confidentiality impose further restrictions, to protect the identities of Government personnel and other participants in the procurement process – both respondent and non-respondent. It may therefore be important to record our judgment that, from the standpoint of reader insight or understanding, virtually nothing has been lost as a result of our inability to name names or even precise products/services. In any given case it may, perhaps, help one's understanding to know whether the Government was procuring studies, major hardware systems, or canned beans, and we have, therefore, in describing cases, presented the most specific information consistent with the maintenance of confidentiality. However, this is quite different from the proposition that it would help to know whether a given study, say, deals with drug abuse or taxes, or whether a procurement is for pencils or paper clips. Brief descriptions of some salient aspects of the 65 cases are presented as Appendix B; and a reading of that Appendix may provide a flavor that is absent from the dry statistical data and from our conclusions and recommendations.

After studying the 65 case files, open-ended discussions of some of them were held with Government personnel, including procurement and administrative specialists as well as "technical" (requisitioning) personnel and small business representatives. This was the the second important source of data underlying our findings and recommendations.

Thereafter, 35 cases were selected for detailed follow-up outside the Government. More exactly, after applying various criteria there were 35 cases remaining, from which it appeared that something useful might be learned from
outside follow-up. For example, we had selected a few case files—which seem, in general, to be organized by contract—that turned out to have been based on the same solicitations as other selected files, and which therefore also had the same underlying lists of bidders and non-bidders (that is, the same lists of recipients of the respective solicitations). Thus, two selected "file cases" sometimes became one from a follow-up standpoint. Similarly, we did not pursue some cases that were sole source awards, or which had bidders' mailing lists that were essentially duplicative of those in cases already selected, or which represented acquisitions under supply schedules that were already in force. For these and a variety of other reasons (principally relating to the age of the original solicitation when procurement was the result of contract modification), then, actual and potential bidders were queried, via questionnaire, in 35 of the 65 awards described in Appendix B.

In connection with the 35 cases a list of 1037 (unduplicated) names and addresses was developed from Government sources, each being asked to answer questions about only one of the selected cases. When the information was available, all of the bidders on a given case were sent questionnaires, as well as all of those recorded in the file as being on the "hand list" (for receipt of the solicitation), except for names used in connection with cases selected at an earlier point. In addition, a selection of names and addresses was made from the automated mailing list corresponding to each solicitation, and from the requests arising from advertising, where this information was in the file. In some instances, however, there was no list of bidders in the file, or even of recipients of the solicitation, so mailing lists for the corresponding questionnaires were devised, in whole or in part, from Government lists that were known to be associated with other, more or less similar procurements by the same pro-
curement operation. In many cases where automated mailing lists were used by the Government for the distribution of solicitations, the number of respondents sought was, of course, only a fraction of the number of apparent recipients of the solicitation, simply because the automated lists were so lengthy. In such instances names and addresses were selected to represent a geographic cross-section of recipients, as well as to ensure the inclusion of some that were well-known and therefore likely to be large.

In addition, in connection with the first three cases dealt with, a mailing list of 268 names was developed independently, from public directories. These were names of firms that were not on any of our lists from Government, but which appeared to be suppliers of items that might be similar to those covered by the solicitations in question - which were relatively routine hardware items. None of the 4 respondents from this effort had any interest in Government procurement, and none provided any insight or information as to the reasons for lack of interest. Thereafter, no effort was made to develop mailing lists from non-Government sources.

A total of 280 usable questionnaires were returned as a result of these efforts. Because of the non-response to the directory-based mailing, these responses must be taken to represent that population of business and other organizations whose names were on mailing lists of the three selected agencies; and there is obviously reason to believe that firms whose names were not on these lists were "different" - if only in terms of their willingness or desire to do business with the Government. On the other hand, there was substantial non-response from the lists developed from agency sources, raising the question of whether these non-respondents differ from the respondents obtained from the same mailing lists. The response data are presented and discussed in Appendix D, but
it is our judgment that non-respondents (from Government mailing lists) do not differ, in respects that matter, from respondents, and our findings and conclusions are based on this judgment. If this judgment should be seriously in error some of our conclusions could well be inappropriate.

3.3 THE SOLICITATION PHASE

In this subsection we focus on the behavior of Government and potential offerors up to the point in the procurement process at which solicitation documents are obtained. This may seem to imply that solicitation documents are a precondition of procurement, although this is not the case: "unsolicited" proposals may lead to awards without issuance or receipt of any document that may be viewed as a solicitation. However, even such proposals are often, and perhaps usually, preceded by some form of contact and communication between the offeror and the Government that may be viewed as occurring in a solicitation or pre-bid phase.

3.3.1 SOME QUESTIONS

In order to describe our findings or conclusions in any sort of meaningful fashion it is necessary to have questions or hypotheses in mind, even in an exploratory effort. Here we summarize some of our concerns about the first phase of the procurement process, which it may turn out to be appropriate to address via (changes in) Government procurement policy:

- There may be many potential participants in the procurement process who do not know how to go about making effective contact with the Government, or with whom the Government fails to communicate. Are there serious participation problems of this type?
- Have many potential participants been "turned off" by prior experience with the procurement process, so that they are not interested in solicitations?
How do potential participants learn about solicitations?

Is it common for potential participants to receive solicitations too late to respond effectively? Do they often fail to obtain solicitations in which they may have an interest?

What are the significant factors in determining salient characteristics of solicitations, such as technical specifications, quantities to be procured, whether it will be synopsized in the Commerce Business Daily, etc.?

Are there significant differences between agencies with respect to the solicitation phase?

Are there significant differences between small business and other respondents?

3.3.2 FINDINGS AND CONCLUSIONS

3.3.2.1 GENERAL NON-PARTICIPATION IN SOLICITATION PROCESSES

Based on this study there is no evidence whatever of the existence of firms which wish to make contact with Federal procurement operations and have failed to do so effectively. It is true that the relevant experiment involved only a limited area of procurement, but it seems significant that a mailing to several hundred firms not known to be on a Government mailing list failed to identify even one firm with any interest in Government procurement.

Similarly, there is little evidence that firms already on Government mailing lists have been "turned off" to a substantial degree by their experience with Government procurement activities. Only about 4% of such respondents expressed any reservations about future participation - as to the extent to which they would "seek" Government procurements - but a number of these respondents pointed out explicitly that this did not imply that they would not sell to, or contract with, the Government, if the latter were to place an order for their
normal product line. In other words, these firms seemed to be discouraged by the costs, low profits, paperwork, inadequate evaluation, etc., that they associated with meeting non-commercial specifications.

The reactions just described do not appear to differ, except possibly in degree, from those of many other respondents. Therefore it does not seem necessary or appropriate to attempt to identify policy changes that would be likely to improve the participation only of the relatively small group who indicated that there were conditions attached to their future participation. We defer consideration of measures that might affect the behavior of those whose responses suggested that they were discouraged by their experience with the procurement process.

3.3.2.2 RECEIPT OF SOLICITATIONS

The usual procurement situation appears to be one in which the Government issues a formal solicitation and synopsizes it in the Commerce Business Daily, at least if we ignore procurements made under modifications of existing contracts or under small purchase procedures. In such advertised situations any reader may request a copy of the solicitation, assuming the synopsis does not identify the procurement as one involving limited competition (such as "sole source"). Furthermore, at least some procurement agencies make extensive use of automated mailing list procedures, under which potential offerors may obtain solicitations in their respective fields of interest, without the need to request them. There are, in addition, many informal (usually unrecorded) contacts between potential offerors and Government agencies (in person, by telephone) in the course of which information about solicitations is communicated. In the situation we characterized as "usual", therefore, there is no obvious reason for any interested offeror to fail to obtain a copy of the solicitation.
In actual fact our data suggest the existence of non-trivial problems. Recalling that our respondents represent organizations whose names are on mailing lists of the three agencies, it is disturbing to find that, of those who said the solicitations described in their respective questionnaires were of interest, 12% were "not aware" of the solicitation, not including 7% who "did not know" whether or not they had been aware of the solicitation. This finding excludes 2 of the 35 cases, in which it is known from the files that synopsis did not occur. (The 33 cases on which our finding is based are known from the file information to have been competitive, but in some instances it was not possible to find an affirmative indication that synopsis had taken place — or the required justification for the absence of synopsis.)

Is it possible that potential offerors are not doing enough to make themselves aware of solicitations of interest? On average, respondents said they "principally relied on" 1.85 sources of solicitation information, consisting mainly (and roughly equally) of bidders' mailing lists, Commerce Business Daily, and personal contacts. It is reasonable to infer that the typical respondent was well aware of the undesirability of reliance on a single type of information source. Nevertheless, some respondents did appear to rely on a single type of source of solicitation information, and these would be particularly susceptible to any sort of "breakdown" in the system. For example, mailing lists may be deficient or inappropriate; actual mailing may not occur; the Commerce Business Daily may omit some items it should have published, or the Post Office may fail to deliver it. Even personal contacts on a frequent basis do not guarantee that the potential offeror will be made aware of solicitations in all areas of interest to him. While we do not know why there was lack of awareness of solicitations of interest, among an active population of suppliers, it seems clear that there is some sort of problem.
Further, of those who said they actually tried to obtain the solicitation, about 2% did not succeed. Whether this is explainable in terms of administrative policy (such as limited availability) or inefficiency, Post Office failures, or other factors, is unknown.

Finally, in the opinion of 9% of the recipients of the solicitations in question, they were not received in sufficient time to bid. Again there are many possible explanations of the finding, including offeror inefficiency, and it is certainly possible that the availability of more time to respond would have made no difference whatever to participation, or even to the responses in our survey. However, there is statistically significant evidence that bidders were much less likely than non-bidders to say that there was insufficient time for bid preparation. The problem of bidding time, at least, represents an easily remediable defect in the solicitation system, and one for which, indeed, there may be only one effective remedy. Our case studies clearly illustrate that many months—years even—may elapse between a requisition and an award, so that a 50% increase, say, in the time permitted for offerors to respond, would scarcely make a dent in the overall time required to process a procurement request. It may be noted that there are no data available on the amount of time actually available to offerors, which depends on time of receipt of solicitation documents in relation to due dates, so it is not really possible to couch a quantitative recommendation in these terms. However, procurement officials might be instructed to allow a minimum of 6 weeks between the expected date of receipt of solicitation documents, by potential offerors, and the due date.

In all, it would appear that well over 20% of potential participants are adversely affected by some sort of deficiency in the process of obtaining solicitation documents. Further, when the data are organized by procuring

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agency, there is unmistakable evidence of differences between them. For example, for the sample as a whole, 81% of those with interest in the specified solicitation, and 30% of those without interest, said they were aware of it; but for one of the agencies the corresponding estimates were 64% and 60%, respectively. In other words, for the agency in question more than one-third of those with interest in their solicitations were unaware of them, and those without interest were almost equally aware! This agency was represented by respondents with (a) the highest proportion of large firms, and (b) the largest number of sources of solicitation information – 2.42 (versus 1.59 for the smallest). Hence it may not be unreasonable to speculate that this agency had policies or practices which somehow restricted the distribution of solicitation documents to a greater extent than those of the other two agencies – possibly by failure to synthesize, perhaps by use of poor hand or other mailing lists, perhaps by severely limited physical availability of solicitation documents, perhaps by pre-specifying the "qualified" firms. Indeed, all of these are relatively plausible for this particular agency, in view of the fact that it was in this agency that we heard the view expressed several times, by technical personnel, that "relevant" experience consisted of having had previous awards from the agency!

The data discussed in this subsection, in terms of solicitation awareness, interest, information sources and solicitation receipt, have been analyzed in terms of respondent size. Here, and throughout this report, the significance of "size" has been assessed utilizing 4 employment-size categories – not merely "small" and "large" – which themselves represent an aggregation of still more detailed information. However, there is no statistically significant evidence that respondent size is related to these phenomena. (Size categories
and numbers are presented in Appendix D, as are other survey data and analyses.)

Despite the fact that we have described the respondents as consisting almost entirely of an "active population of suppliers", it may be worth pointing out, in conclusion, that a substantial proportion of them appear not to have been very determined or persistent in their pursuit of Government business — or, perhaps, wished to sell items very rarely purchased by the Federal Government: 19% of respondents reported receipt of fewer than 1 solicitation every two months. This may be contrasted with the 15% of respondents who said they obtained more than one solicitation every working day.

3.3.2.3 SOLICITATION CHARACTERISTICS

Many potentially important characteristics of procurements are determined prior to issuance of a solicitation — including, of course, the decision as to whether there will be a solicitation at all, or whether, on the contrary, there will be a sole source award. Such questions as whether the procurement will be formally advertised, whether it will be synopsized, whether it will or will not be a small business or other set-aside, and, indeed, nearly all the other elements of the eventual contract, grant or other agreement, are specified unilaterally and in advance by the Government. What determines these characteristics, which may importantly affect the relative participation of small and large business?

In principle, procurement operations must be guided by regulations — such as Federal Procurement Regulations — in making such decisions. In many respects these choices would appear to be totally routine, almost automatic: for example, some contractual clauses are selected, at least in some procurement operations, via a "clause manual" which seems to leave no room for discretion.
once some salient factors are specified (such as whether the contract will be of the "cost" type). However, there is no doubt whatever that discretion and/or interpretation play a major role in some respects, of which we here consider those that we judge to be of greatest significance from a participation standpoint.

**Limited Competition**

First there is the question of sole source awards, for which there may be no formal solicitation document, and which may be made in a broad variety of circumstances ranging from the acceptance of an unsolicited research proposal to the purchase of a particular brand of commercial typewriter from its manufacturer. Except for small purchase orders under supply schedule contracts, we saw no instance in which the impetus for a non-competitive procurement came from procurement personnel. The sole source was invariably specified by requisitioning personnel, who seemed to know little (and care less) about procurement regulations; and while it is true that such specifications were sometimes questioned by procurement personnel, we saw very little evidence of actual resistance by the latter. Of course, it was often the case that procurement personnel were in a poor position to challenge a sole source request, simply because of their relative ignorance about the items being procured and their possible sources. Partly for this reason the usual situation was, apparently, one in which the procurement personnel utilized their expertise to create file documentation which would support the decisions previously made by "technical" or "administrative" (that is, non-procurement) personnel.

By implication, of course, we are here questioning the basis of some sole source awards; for, to the extent that sole source awards should have been competitive, participation was unduly restricted. In some instances the file
justification was inadequate and/or inconsistent on its face, and in one award, based on an allegedly unsolicited proposal, it seemed clear to us that the proposal must have been unofficially solicited. Further, except in one case, we saw no evidence of any search (for sources) that might provide support for the common statement that "no other source is known to the Government": for example, it did not appear that other agencies, even within the same Department, were generally queried about possible sources; nor was advertising undertaken. In the one instance we saw where a sole source was justified on the basis of a search, an alternative source can be identified from the file itself, casting doubt on the thoroughness of the search or the reliability of the justification. A commitment to competition would surely have required, in general, more diligent efforts to identify alternative sources.

The phenomenon we have just pointed out is not, in our view, restricted to sole source awards. In some other instances the qualified sources were selected "by hand", and the corresponding solicitations were not synopsized; that is, competition was deliberately limited because of "urgency", "security", etc. In one of these cases the firms solicited were said to consist of those identified by "project personnel familiar with past work" for the agency in question; in a second the solicitation recipients consisted of exactly two firms identified through a telephone call to an unidentified individual in another agency — in a situation where we just happened to be aware that there were many, many apparently qualified firms. It seems fair to say that, in situations of restricted competition, the identification of solicitation recipients is inadequate, in view of the apparent absence of acceptable, systematic procedures.

However, a much more fundamental question is raised by these observations. One may accept the proposition that, in a given case, competition ought
to be limited — because of "urgency", say, or other reasons suggested by section 2 — and still believe that there are systematic deficiencies in the approach to the identification of appropriate recipients of solicitations. Even more serious is the question of whether the deliberate limitation of competition is used to an extent that is unjustifiable. For example, the fact that a solicitation or procurement may have a national security classification (such as "secret") is not, in and of itself, a good enough reason for failure to synopsize, since the synopsis can frequently be stated in an unclassified way; and, even if it cannot, an advertisement in the Commerce Business Daily could always specify the qualifications which the procuring agency views as minimal for receipt of the solicitation. Similarly, the increase in the length of the procurement cycle that may be attributable to synopsis and unrestricted competition is no more than a few weeks — a difference that is in many cases, including some allegedly urgent ones, trivial — so that a question again arises as to whether competition and participation are being inappropriately restricted.

We are not asserting, of course, that the observed restrictions were generally inappropriate: we did not have the facts which might have permitted such a determination. Nevertheless, there were certainly questions in our minds about whether the interpretation and application of procurement regulations might not have become increasingly loose. Higher-level approvals of some of the contracting officers' decisions to limit competition did occur, but there did not seem to be any type of review or audit of the application of these procurement regulations by personnel outside the procuring agency. Some type of independent review might have tended to maintain or increase participation in the procurement process.

We should add that, in sole source cases, we had no reason to believe
that the decision-making process introduced any special biases against small business, although one may speculate that it is less plausible for the Government to assert the unique capability of a small business, and therefore that it may be less likely to do so. Further, to the extent that competition was invited from, or limited to, a pre-selected "hand list" of solicitation recipients already "known" to Government personnel, it is hard to imagine that there was not—as discussed later in connection with the award phase—an anti-small-business bias. Such bias in solicitation issuance could be controlled, of course, either by reducing the number of cases of restricted competition, or by use of an improved process for identification of those who should be invited to bid.

Despite our sense, from file information, that competition was, at times, being inappropriately restricted, it was quite possible that the Government had actually identified the firms capable of meeting its needs. A minute experiment was therefore conducted involving two cases in which there was no synopsis, for which no solicitation was available, and in which awards were made without competition. A special Part I was developed for the questionnaire (Appendix A, Figure 4) since we knew there was no solicitation the respondents could provide information about; and a mailing list was developed from material we had at hand—mailing lists used by the agencies involved in connection with other procurements—consisting of 37 names. In response, 9 completed questionnaires were received, and while the evidence has no meaning in terms of statistical theory, the fact that we could identify 2 respondents who thought they might be capable of meeting the Government's requirements—without trying very hard or systematically—is not grounds for complacency about the distribution of solicitations in situations of deliberately limited competition.
Small Business Set-Asides

Agency personnel, some of whom may have little use for competition in other contexts, seem to discover its virtues whenever a set-aside for small business is proposed. There is a very common perception that a set-aside is an arbitrary restriction on the competitive process—a restriction whose effect will necessarily be that the procuring agency will obtain something less than the best firm available, and thus endanger or reduce the achievement of agency objectives that may be Congressionally mandated (that is, "the" agency mission). If the small business were really best, the argument runs, why would it not win in an unrestricted competition?

Even disregarding possible long-run phenomena, there are at least two counter-arguments. First, there is an anti-small-business bias (discussed later) which means that, when competing against large competitors, small businesses may be at a serious disadvantage. Secondly, a set-aside may induce more small business participation, and while large business would, of course, be precluded, the result, on balance, may be more competition.

Another argument against set-asides that was frequently made by agency personnel concerned past set-asides which had failed to generate competition that was adequate in terms of quality and/or quantity (for example, only two offerors) and thus resulted in delay. We have no doubt that such situations did indeed occur, but it is worth pointing out that offers obtained under the set-asides were judged by the very people who generally object to them. We think it significant, in interpreting comments about past set-asides, that there was not a single comment about the not infrequent situations in which procurements clearly not open to small business yielded little or no competition.
When a small business set-aside is, in fact, achieved, it is often — apparently invariably in some agencies — through the recommendation and intervention of a spokesman for small business, such as a small business specialist or SBA representative. This spokesman will ordinarily make his recommendation after reviewing the intended procurement, with the case for a set-aside resting on the proposition that there will be adequate competition from small business. Somehow, then, the small business spokesman must identify an adequate number of anticipated small business offerors who will be deemed to be responsive and responsible. Sometimes such firms can be identified from having bid on "similar" procurements in the past; but if, for any reason, the selected similar procurement failed to yield an adequate number of such bidders, there will be no set-aside. Since the failure to bid in the past may have been the result of some aspect of the specifications that was not acceptable to many small businesses — such as too large a quantity to be produced by the required delivery date — the result of a prior "error" may be to preclude set-asides for a long time, in the given procurement area.

Sometimes potential sources are identified by the requisitioning unit as a (perhaps partial) "hand list", and submitted for review along with the procurement request to the small business spokesman. This list may contain an adequate number of small businesses, and a set-aside may be recommended, but this tends to happen, we were told, only when the requisitioning unit has made a mistake or has predetermined that they would not object to a set-aside — perhaps because they have learned that some minimal role for set-asides can hardly be avoided. Requisitioning units soon learn not to make the small business spokesman's job too easy, however. For example, we were told that they sometimes deliberately omit qualified small businesses from the source list,

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and, when the procurement request has gone through without a set-aside recommend-
ation, add the omitted names to the bidders' mailing list.

When the source list comes to the small business spokesman without a sufficient number of small business names to justify a set-aside, it is, of course, an aim of that spokesman to identify additional small business sources. To do this, however, requires that the nature of the procurement be understood sufficiently well for the spokesman to establish what firms are qualified, or will be accepted as such by requisitioning personnel. At this point precisely the same problem arises as for procurement personnel: they are often not really qualified to make such judgments. But while this causes no embarrassment for procurement personnel, to the extent that they operate as "team players", the small business spokesman, to be effective, cannot operate as a team player and is not regarded as such. The "technical" inadequacies of small business spokes-
men, as evidenced by allegedly inappropriate firms, becomes one more, loudly proclaimed, reason for rejecting their recommendations for set-aside.

We suspect, although we have no direct evidence, that an integral part of the problem of achieving appropriate set-asides lies in the SIC that is attached to the requisition. We saw no case in which this was questioned by the small business spokesman, and it would generally have been difficult for him to do so without greater technical insight — especially when the procurement really involved more than one SIC. Since the size standard utilized is associated with the SIC, the ability to determine it is also the ability to influence the like-
lihood of set-aside and the firms who are permitted to compete if there should be a set-aside. Our judgment is that there are many situations in which the determination of the appropriate SIC is, in fact, a matter of judgment, since a single procurement may cover different kinds of elements, such as development,
production, and logistic studies of certain equipment.

One vehicle used by small business spokesmen to identify qualified potential offerors, namely, the PASS system, deserves a comment. Although we did not, in conversation, ever refer to the system, there were a number of volunteered references to it, each being derogatory. Obviously such a system can be effective only to the extent that firms are indexed in such a fashion that users can determine the correspondence between procurement requirements and the qualifications of the firms; but it was precisely in this respect that the system was deemed defective. It may be added that respondents to our questionnaire clearly did not rely to any significant extent on the PASS system to learn about solicitations. In our judgment a review of the PASS system is clearly called for.

The success of the small business set-aside program, as measured by the frequency with which set-asides occur, will clearly continue to depend on the understanding (of items being procured and their possible sources) and on the aggressiveness of small business representatives. It will also depend on judgments of requisitioning/procuring personnel about what constitutes adequate competition, and on their beliefs about the magnitude and acceptability of the increase in cost and/or reduction in performance attributable to set-aside. In our view it would be better, given a commitment to providing "special consideration" for small business in Government procurement, to abandon the present approach, which sets up and perpetuates an adversary position between small business representatives and technical/procurement personnel. A better approach would involve totally unrestricted competition in the solicitation phase, with any assistance to small business being provided in the award phase, perhaps monitored by small business representatives. In the simplest case, for
example, this "assistance" might take the form of specifying, by regulation, the differential in price at which large and small business offers would be considered equal; that is, the law/regulation might specify for the simple case postulated — one suitable for formal advertising — that a small business bid will be preferred to a large business bid if it does not exceed the latter by more than x%. We defer further discussion of such a possibility, and merely point out here that the fundamental approach just mentioned is already well-established in Federal procurement processes, in connection with competition between foreign and domestic products.*

Despite any difficulties or defects in the set-aside program, or any possibility of improving it, it is clear that small businesses with fewer than 100 employees would prefer greater use of set-asides (by about 4 to 1); while in the range 100-499 employees only 43% of respondents said they would prefer more use of set-asides. The result may appear difficult to explain, but is plausibly attributable to the fact that a firm with, say, even 50 employees, may be ruled out by a size standard of $2,000,000 in annual sales, and might therefore wish to see fewer set-asides. It may also be the case that some set-asides are perceived as pointless: for example, a size standard of 500 in average annual employment for the procurement of an analytic study requiring one man-year of effort.

It may be of some interest to note that the longer a firm has been

*Federal Procurement Regulations (41 CFR 1-6.104-4) state, in part, that "Each foreign bid shall be adjusted for purposes of evaluation by adding to the foreign bid...a factor of 6 per cent of that bid, except that a 12 per cent factor shall be used...if the firm submitting the low acceptable domestic bid is a small business concern...." In principle such competition might have been handled by the device of "domestic set-aside", to be used under conditions analogous to those for small business set-asides — for example when it was expected that there would be reasonable domestic competition.
in operation the less likely it is to call for more use of small business set-asides. Further, the set-aside concept, as actually applied, did not receive general approval from those who responded to our survey: 51% said it was true that many such set-asides ought not to be, while 68% believed that many procurements that ought to be set-asides were not. These beliefs provide evidence of likely support for the kind of change in "special consideration" for small business that was mentioned above, inasmuch as it would be unnecessary to determine, for any procurement, whether it was or was not to be set aside. It would also make it possible to differentiate those situations in which the cost of set-aside is high, in procurement dollars, from those in which it is low.

**Output Specifications**

Solicitations normally contain a description of the product/service that the Government wishes to obtain, including quantities, item characteristics, and delivery dates (or contract duration). Obviously the nature of these specifications may have a profound impact on participation: in the most extreme case the solicitation may even specify Brand X. How are the specifications established? A full consideration of this question would be beyond the scope of this study, since it would require discussion of the responsibilities of each agency and its subdivisions, an account of budgetary processes, and a description of other analytic and decision-making processes (such as cost-benefit analysis, inventory policy determination, and so on). Here we treat the problem as if there were only two actors, namely, a requisitioner and a procurement official.

Unless a requisitioner actually names a desired supplier or contractor, his output specifications are likely to be accepted without any question. Consequently he can, deliberately or otherwise, generally constrain particip-
ation in ways which may or may not be desirable. If it is absolutely essential that the product/service have a particular characteristic, it would be a serious disservice to the potential participant not to say so in the solicitation. In many instances, however, it appears that there are participation-limiting specifications that represent mere preference, without regard to participation and possible tradeoffs. Here we identify a few of the ways in which the specifications may limit participation, often to the detriment of small business:

- The product may be required to have some trivial feature: the manufacturer's name in a particular location; a particular color, for example on a tool handle; precise, non-critical dimensions or materials, as in the case of some furniture; and so on without end. This device can be used to make sure that a particular brand is obtained.

- The supplier may be constrained as to location: for example, within 50 miles of the requisitioner. What dire things would befall if the supplier were 60 miles away is generally not disclosed, even to procurement officials.

- The successful offeror may be required to have highly specific experience, as with a particular equipment, Government installation or model. At times it is known to the requisitioner that only one potential offeror will be deemed qualified by the specified criterion — but a sole source justification may be avoided. Offerors learn to interpret such specifications as meaning that the Government wishes to utilize a particular contractor, and therefore often do not bid.

- It is not infrequent for requisitioners to seek a contractor who will be capable of providing a number of different types of items, between which there may not be any highly relevant connection in terms of qualifications. For example, the Government may have an interest in a particular type of
physical system, and may seek a single contractor who will be capable of providing the relevant R&D, production, spare parts, system maintenance and/or operation, technical manuals, personnel studies, logistic studies, etc. Despite the fact that there may be a single underlying system, a firm which is best in terms of production need not be best in terms of, say, studies of required personnel, so there may be a loss to the Government from this type of solicitation specification that manifests itself in both cost and performance. Even if it is true that administrative costs are higher when several awards must be made — as claimed by procurement personnel — the price of such "saving" may be high. Obviously, in terms of participation, the larger and more complex the award package, the smaller the number of firms who will deem themselves qualified — presumably to the great comparative disadvantage of small firms.

- Even when it is anticipated that the successful offeror will subcontract in order to meet solicitation requirements — he may even be required to submit a subcontracting plan — the possibility of direct acquisition of the subcontracted items seems not be considered, at least in our observation. Procurement of subcontractable items by direct solicitation is discussed later under the heading of "breakout".

- Requisitioning personnel often specify multi-year procurements, especially in large production contracts (to large firms), although in the solicitations the years after the first are usually treated as Government options (almost invariably exercised), with awards being made by contractual amendment. Since amendments of competitive awards are apparently treated as competitive, the effect is to exaggerate (we believe greatly) the dollar volume of awards in which there is opportunity for competitive participation in any one year.

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We may add that 58% of respondents agreed that requirements were often such as to preclude, unnecessarily, the participation of small business.

Although requisitioning personnel almost always get what they want in terms of technical specifications, because there is usually no one to challenge their relative expertise, this does not mean that there is an automatic correspondence between requisitions and solicitations, in terms of output specifications. The procurement personnel who are responsible for solicitation issuance are often concerned about participation, and will sometimes do what they believe will encourage participation—short of challenging anything that is said by requisitioners to be a requirement. In addition, procurement personnel are concerned about administrative effort. The result is that there are certain respects in which solicitations may well differ from their underlying procurement requests. First, there is frequently a choice as to the number of units of an item that are to be procured at one time; and procurement officials will often choose to combine requests for the same item, on the theory of improving participation and cutting administrative cost. Secondly, they will frequently "group" line items, within a solicitation, for award, not only to increase the size of the (minimum) award, but also to increase the likelihood of obtaining bids for low-dollar-value line items. Third, they sometimes seek to encourage participation by use of minimum and/or maximum quantities in indefinite quantity solicitations.

Despite these efforts of some procurement operations, we were not convinced of their effectiveness, since we believe that the relation between the variables just discussed and participation is actually unknown. A large procurement may encourage a large firm and discourage a small one. Putting an unpopular line item into an "award group" may discourage offers for the entire group and/or unreasonably raise the price for the group. Without know-
ing a great deal about the circumstances of the individual potential offerors, the effects on participation of minimum and/or maximum quantities cannot be predicted with any confidence. Finally, because of the frequency with which it is apparently necessary to resolicit—as a result of the absence of offers that are acceptable—it is even unclear how administrative costs are affected by the types of "technical" specifications that seem to be influenced or even determined by procurement personnel.

A final point regarding output specification in solicitations may be worth making. When solicitations are considered one at a time it often seems to be the case that the Government has, indeed, no choice but to require the products/services of a particular contractor, or to utilize specifications that can be met by only a couple of firms, so that limited participation appears inevitable. For example, when the Government is using a particular manufacturer's equipment, it may be true that only the manufacturer can supply replacement parts or service. There may be a perceived need for standardization, in which event new awards may be made without competition. A contractor may possess data which is "proprietary"—perhaps even as a result of a prior award—so that the Government must use the same contractor again; or the Government may simply have failed to acquire the drawings and specifications which would have permitted the use of another contractor. Perhaps most importantly, and especially in the case of Government-peculiar items such as tanks or submarines, the Government itself may, by its past purchases over a long period, actually have determined that there will be only one or two potential participants. A serious concern for participation would dictate that the long-run effects of solicitation specifications be considered before acceptance; and, if the participation is to be by small business, in situations where there are only a few large producers curr-
ently, the specifications must be so selected that they are capable of being met by small firms. There are probably very few procurement situations in which current limitations on "qualified" vendors could not have been greatly reduced by taking account of long-term effects of earlier procurement choices.

**Participant Specifications**

Participation may be restricted deliberately by requiring that the successful offeror have certain characteristics, of which the most important, for present purposes, may be the small business set-aside, already discussed. However there are many other possible restrictions on participation, such as "set-asides" for labor surplus areas, minorities, universities, government agencies, non-profit organizations, and so on. Some of these restrictions of course rule out small business totally, and in general they can be expected to eliminate more small businesses than they assist. An advocate for small business, as such, would, therefore, resist such restrictions whenever feasible. While we did not see enough cases in these categories to have a sense of how important they may be in restricting small business participation, it is surely reasonable to question some of them: for example, what public purpose is served by restricting some procurements to non-profit organizations?

Participation may also be restricted by imposing absolute "requirements" on offeror qualifications: we have already mentioned one of these that may also be considered to be a product/service specification, namely, the offeror's location. There are many such possibilities, such as requirements that a project manager or other personnel have certain experience, or that the offeror have pre-award access to certain institutions, or that he possess a particular data base. Some of these restrictions sound innocuous, even reasonable, when stated generally, but may be something quite different when any
particular case is considered, since they may be deliberately stated in such a way that participation is restricted to one or a few firms: for example, experience with particular equipment may be required when it is known that only one firm has had such experience.

More frequently, however, the restrictions on participation are not absolute, but appear as "criteria" in solicitations for negotiated awards. Such criteria are, like output specifications, in practice determined by the initiators of procurement requests; and the possibilities of abuse — of undesirable restrictions on participation — are, in our view, quite serious. Of course, if they are actually to be applied in the award process it is obviously better that they be stated in advance and known to potential participants. However, when the restrictions are not specific and absolute — as when the award criteria call for "relevant" experience — the line between solicitation and award is unclear. We defer further consideration to the award phase.

Other Solicitation Characteristics

There are a very large number of solicitation characteristics that may affect participation, whether they are designed to do so or not. However, no attribute of a solicitation can affect participation in the pre-bid phase if that attribute is unknown to the potential participant prior to receipt of the solicitation. For example, a solicitation may specify that a cost-type award will be made, but this will obviously not affect the names appearing on an automated mailing list, or those who request the solicitation through a Commerce Business Daily synopsis that does not specify the type of contract pricing. Our judgment is that, except for some of the phenomena already discussed, participation in the pre-bid phase is little affected by solicitation characteristics.
3.3.2.4 MARKETING

We use the term "marketing" to refer to those selling activities of potential offerors that are not undertaken in response to specific solicitations. By definition, therefore, they occur, if at all, during the pre-bid phase, and the question we consider is whether such activities are important to potential offerors. In general, the marketing activities that are here considered consist of some form of communication between Government personnel and potential offerors, on the initiative of the latter.

Based on discussions with agency personnel it is clear that, while there are major differences between agencies, the potential significance of marketing is not to be denied. In one agency the personnel were very explicit: "If you want to sell in this agency, you must come around and get to know the project people in your area of competence. You must learn their interests and — yes — their biases. Just as important, they have to get to know you and your capabilities. Brochures and letters just won't do. If you submit a proposal and they've never heard of you, forget it." They went on to explain that, when a synopsis appeared in the Commerce Business Daily, it was usually too late to participate, because the people who had "come around" had known about it long before and could prepare for it. Further, they were in a position to understand what project personnel really had in mind, in a way that solicitation documents could not, and certainly did not, communicate.

In another agency personnel did not seem to regard personal visits as being very important, but, for any substantial procurement, it was said, it was almost a prerequisite that the offeror have a "prior track record" with the specific sub-agency involved in this study. By implication, an appropriate marketing strategy for selling to this agency would have been a
a very long-term one, involving personal visits (at least to begin with), the submission of offers (possibly unsolicited) for relatively small projects that might result in awards, and hence the development of the required track record. The attitude in this agency was, in effect, that its problems and needs were so special that there could be no adequate substitute for experience with them — as evidenced by prior successful performance for the agency.

In the third agency, whose procurements tended to be more frequently for routine items that were formally advertised, there was the least role for marketing activities. However, personal visits, brochures, etc., seemed to have some role in the preparation of "hand lists" for the mailing of solicitations, perhaps affecting the likelihood or timing of offeror receipt.

In each of the foregoing cases we have excluded from consideration those situations in which the choice of vendor is made from a multiple award schedule, or under small purchase procedures. We were informed that marketing, in the form of routine calls by salesmen at the local level, was often an essential of success in such procurements.

Obviously, to the extent that marketing is important, small firms are at a significant disadvantage. First, a small firm can select only a small number of "targets" for its marketing activities, so that the risk of loss of its investment is relatively high. Second, small firms tend to obtain small awards, but the marketing effort required in any selected agency may be the same as for a large firm that obtains a large award. Third, a large firm's marketing effort may be more efficient to the extent that it has a large and relevant product line — as, for example, when calling on local activities. These disadvantages of small business would exist, of course, even in the
absence of any anti-small-business bias.

These findings suggest that, in the interests of small business if for no other reason, it may be important to reduce the significance of marketing activities. (We view it as infeasible to eliminate them.) As we see it, the advantages that accrue to marketers can be reduced only if steps are taken to (1) revise award criteria and procedures, and (2) improve communication with potential offerors during the pre-solicitation phase, or on a routine basis. We expand upon these possibilities later, but it may be noted that even the successful implementation of such changes would do nothing to counterbalance the marketing advantages of large firms with respect to local activities.*

It may be added, in conclusion, that the alleged importance of marketing activities in the current system is fully consistent with the beliefs expressed by respondents to our survey: 75% said it was true that there were many substantial awards/solicitations not synopsized in the Commerce Business Daily; 79% said it was true that, by the time a solicitation was synopsized, it was usually too late to go after it; 80% said it was true that many solicitations are only nominally competitive; but only 39% said it was true that the Government provided adequate assistance to small business in making its capabilities known. 50% of respondents identified marketing costs as an "important factor" limiting their participation, with only one other factor (out of 17 possibilities listed) commanding significantly greater agreement.

*It seems reasonable to believe that marketing is a relatively more important factor for unsolicited proposals than for solicited ones — almost by definition, since, for the former, it is only marketing that provides information about the Government's interests. To the extent that marketing is important to success in Government procurement, therefore, small firms may be in an especially disadvantageous position to utilize unsolicited proposals. It does not follow, of course, that small firms ought not to concentrate their marketing efforts in the area of unsolicited proposals.
3.4 THE BIDDING PHASE

The bidding phase is viewed as beginning with the actual receipt of solicitation documents, and ending with receipt of proposals by the Government. The beginning of this phase (which is the same as the end of the solicitation phase) is not well-defined, therefore, for unsolicited proposals.

3.4.1 SOME QUESTIONS

The most fundamental question with respect to the bidding phase may be stated as follows: Given that a potential offeror obtains a solicitation, what is it that will determine whether he will participate, that is, submit an offer? Obviously our primary concern is with those factors that may be controllable by the Government, in whole or in part, but it should also be recognized that it may be necessary to understand the impact of other factors.

Second, to what extent are there differences between agencies? The importance of this question is not academic, but is related to the very practical matter of whether it may be necessary to study or evaluate policy on an agency-by-agency basis, in order to determine the changes, if any, that may be appropriate. It should perhaps be pointed out that any observed difference "between agencies" may also involve differences in the nature of their respective procurements, or in the characteristics of their respective lists of firms who received or were sent the selected solicitations.

A third basic question involves the relative participation of small business and other offerors: Given that a small business obtains a solicitation, are there Government policies or practices which tend to encourage small businesses to submit offers, or discourage them from doing so?

Finally, it may improve perspective to have some sense of the quant-
3.4.2 FINDINGS AND CONCLUSIONS

3.4.2.1 FACTORS INFLUENCING BIDDING

We sought to account for decisions regarding bidding on the selected cases, among those who said they had read the corresponding solicitations, by asking respondents to assess, or provide their reactions to, various attributes of these solicitations. In other words, we tried, in one part of our effort, to avoid asking respondents to make broad generalizations concerning "procurement" or "solicitations", since we believed that much of explanatory value might—if we were to rely on such generalizations—be lost. We believe that responses to questions that pertain to specific cases, and the inferences that may be based on them, are intrinsically more reliable than those based on the generalizations of respondents. However, those respondents who had not read the relevant solicitation could not contribute except by providing overall judgments or assessments. For example, the reader of a solicitation may be asked whether that solicitation is deficient, while the non-reader may be asked, correspondingly, whether solicitations generally are deficient; but the fact is that the respondent's answer to the latter question does not necessarily imply his answer to the former, or vice versa.

Factors Relating to the Selected Procurements

Among those who had read (one of) the selected solicitations, the factors which most clearly differentiate bidders and non-bidders consist of the respondents' assessments of their ability to meet solicitation specifications, especially product/service specifications, but also including delivery dates and "other" requirements. Bidders and non-bidders were clearly differentiated from each other, also, in terms of whether they said there was ade-
quate time available for submission of offers, and in terms of their confidence in the technical assessment of offers. There is also strong statistical evidence of "encouragement" to bid when there had been (self-assessed) past bidding success, especially in past offers of the same type, and when the "grouping" of items for award was deemed to be desirable.

In contrast, we do not view the evidence for the significance of other factors as being very convincing, although perhaps suggestive; that is, at a confidence level of 95% it lacked statistical significance. These other factors include: the clarity and consistency of the solicitations; various aspects of competition, including ability to predict the probable (important) offerors, the successful offeror, competing prices, or competing service/product specifications; and beliefs about Government behavior relating to its assessment of the costs of competing offers, the role of stated versus unstated evaluation criteria, and the timing of award. However, here as elsewhere, some of the "non-influential" factors would have been classified as differentiating bidders and non-bidders had we chosen somewhat lower confidence levels.

There were also a number of features which respondents said had affected ("encourage", "discourage", or "no influence") their bidding behavior regarding the selected cases, but for which there was no evidence (at the 95% level) of difference between bidders and non-bidders. These factors included award size (whether dollars or units); type of contract pricing; type of competition (such as competitive negotiation); type of award (such as definite quantity); small business set-aside requirements; criteria of evaluation of offers; costs of bid preparation; and anticipated business conditions. The absence of strong evidence of effect on bidding behavior is surprising for some of these factors, if only because of large observed differences between them in the proportions of respond-
ents who said they were encouraged or discouraged or uninfluenced. For example, about six times as many respondents were encouraged by the size of the award as were discouraged, while about four times as many were discouraged by the cost of preparing the bid as were encouraged, yet neither factor differentiates bidders and non-bidders at the 95% level.

The fact that a variable does not differentiate bidders and non-bidders does not, even if accepted unquestioningly, provide Government with sound reason for losing interest in it. This may be illustrated easily: for example with respect to the variable that defines the response to the question about the influence of "criteria of evaluation". The fact that this variable does not appear to be influential could be attributable to a widespread belief that, say, there is very little relation between the Government's stated criteria and actual evaluation or award. Even if the true explanation is of a totally different kind there is ground for concern, since, in publishing evaluation criteria, the Government presumably believes it is providing useful guidance. However, the real significance of any result, positive or negative, may depend on an assessment of all findings, considered collectively.

Factors Relating to Procurement in General

All respondents, whether or not they had any knowledge of the specific cases selected for study, were asked to identify which of 17 factors were viewed as "important" in limiting "direct participation in Government solicitation/award processes" — as distinct from participation in bidding on the selected procurements. Only one factor differentiated bidders from non-bidders at the 95% level of confidence, namely, costs of preparing offers. The result is interesting for several reasons, among them the fact that it superficially contradicts an
earlier finding. Moreover, respondents were about equally divided as to whether this factor was or was not important, whereas those factors about whose importance there was a substantial measure of agreement failed to show up as differentiating bidders and non-bidders.

As measured by consensus, the most important factor limiting participation in bidding was the fact that "some organizations have an inside track". There was also a strong consensus that some factors were not important in terms of limiting participation: the inadequacy of safeguards of proprietary information; the additional (Government-imposed) restrictions on operations; the danger of dependence on Government; excessive competition; or the need for dishonesty to obtain substantial Government business. Only four factors, in addition to "inside track", were said by at least half of the respondents to limit participation: marketing costs/difficulties, as mentioned in connection with the pre-bid phase; unnecessarily restrictive product/service specifications; costs of preparing offers; and inadequate profit on Government business.

All respondents were asked to express a preference for "more use", "less use" or "no change", with respect to each of 20 procurement features. Of these, 4 served to differentiate bidders and non-bidders, among those who had read one of the selected solicitations: bidders were more likely than non-bidders to favor more use of commercial specifications and of local procurement, and to favor less use of basic ordering agreements and options. Again we can show that the existence of even a strong consensus is not obviously related to bidding behavior. More than half of all respondents wanted "more use" (rather than "less use" or "no change") of the following: incentive contracting; multiple award schedules; multi-year awards; definite quantity awards; small business set-asides; prequalification of offerors; and bidders' conferences.
Finally, all respondents were asked about the truth or falsity of each of 9 propositions about the procurement process. Of these, only one significantly differentiated bidders from non-bidders: non-bidders were more likely to say that "many solicitations are only nominally competitive". It may also be worth noting that it was this statement that commanded the highest measure of agreement (80%), but a number of others also were "popular" — as discussed in connection with marketing and the pre-bid phase.

Factors Relating to Subcontracting

Of 7 candidate explanatory factors, identified in our questionnaire as possibly being important in limiting subcontracting, there were 3 that were accepted as true by 50% or more of the respondents: the difficulty experienced by potential subcontractors in tracking opportunities and/or marketing their capabilities; the unpredictability of subcontracting opportunities; and the unwillingness of prime contractors to subcontract.

Summary of Factors Affecting Bidding

There are some factors which have been shown to differentiate bidders and non-bidders on the selected procurements, and which therefore have a claim to serious consideration as influences on participation in the bidding phase. These factors, for which statistical significance has been established at the 95% level, and which we designate as Group I, are as follows: (1) the potential offeror's assessment of certain solicitation/agency features, namely, ability to meet product/service specifications, adequacy of time available for bid preparation; adequacy of technical assessment of offers by the Government; the grouping of items for award; and the costs of offer preparation; and (2) the potential offeror's preferences with respect to commercial specifications; local procurement; basic ordering agreements; and option items.
However, it is quite possible that these findings are strongly dependent on the mix of agencies and/or cases and/or potential offerors, so their significance may be more apparent than real. Conversely, if a factor fails to differentiate bidders and non-bidders, especially when high confidence levels are employed, it may be for the same reasons. Therefore it may be worth noting the best candidates among the remaining factors, some of which may actually be more influential than some of those already named. In our judgment the best candidates for which statistical significance at the 95% level has not been established — here called Group II — are as follows: (1) the potential offeror's appraisal of the size of the award; the anticipated profit; and competition, including the belief that it is nominal or that some firms have an "inside track"; and (2) the potential offeror's preferences with respect to incentive contracting; multiple award schedules; and prequalification of offerors.

We note that we have dropped from consideration the offeror's prior success rate, because, while we do not doubt its impact on participation, it cannot be affected by any property of a current solicitation. (Note, however, that the Government significantly influences participation in the long run through its influence on success rate.)

3.4.2.2 FACTORS DIFFERENTIATING AGENCIES

In this subsection we consider each of the factors identified in the foregoing summary as potentially affecting bidding behavior, to see whether differences between agencies are also significant. The presence or absence of such differences may help confirm that a given factor really does influence bidding behavior, provided the observed differences are consistent with other agency-related observations. Interagency differences are here ignored unless
statistical significance is established at the 95% or higher confidence level.

Group I: Ability to Meet Product/Service and Other Requirements

The difference between agencies with respect to this factor is significant, and in the direction we would expect based on analysis of the pre-bid phase: the agency which seemed least effective in getting solicitations to those with interest in them was also the agency in which only 48% of respondents said they could meet the product/service specifications (versus 72% for the highest of the agencies). While the difference between agencies is judged to be real, we have no reason to believe that this can account for the apparent influence of this factor on participation.

Group I: Time Available for Bid Preparation

The difference between agencies is not significant; nor did we observe anything that would have led us to expect a difference between agencies. We believe that bidding is inhibited, in all three agencies, by the amount of time made available for bid preparation.

Group I: Government's Technical Assessment of Offers

There is a highly significant difference between agencies with respect to this factor, with confidence in the Government's technical assessments being highest — not surprisingly — in that agency making most use of formally advertised procurements and commercial specifications. We infer that this may be an especially important inhibiting factor in bidding situations in which a "technical proposal" or physical sample may be required of the offeror.

It should perhaps be pointed out that the difference between agencies in terms of respondents' "confidence that cost assessment of offers would be adequate" was just as significant, yet this did not appear as a factor differen-
tiating bidders from non-bidders. This strengthens our belief that the absence of confidence in the technical assessment of offers really inhibits bidding.

**Group I: Grouping of Goods/Services for Award**

This factor does not differentiate agencies, and our finding about the influence of this factor is unlikely to be attributable to the chance selection of cases, bidders, etc.

**Group I: Costs of Bid Preparation**

The differences between agencies are highly significant: in one agency, for example, 70% of respondents said this factor had no influence, in contrast with about 33% in another agency. We know that the former agency seldom employed technical proposals, at least for the cases we studied; while the need for such a proposal was routine in the other agency. In other words we know that there was a real difference between agencies in terms of the cost of making an offer, so that the observed differences between agencies make sense in their own right. We know of no reason to believe, however, that the apparent impact of this factor on participation is not real, especially when the cost is substantial.

**Group I: Type of Award**

Under this heading we discuss four factors that differentiate bidders from non-bidders, namely, respondent preferences with respect to the use of commercial specifications, local procurement, basic ordering agreements, and option items, respectively. The differences between agencies are significant for the first three, and almost so for the fourth, and the impact of these factors on bidding behavior cannot properly be assessed without taking account of these inter-agency differences.
Consider, first, commercial specifications. It was only for cases drawn from one agency, dealing with routine procurement of small hardware items, that the use of commercial specifications could make any sense: it is hard to imagine the use of commercial specifications for a study project, for example, or for a submarine procurement. In other words, it is likely that this factor is an extremely important one, in those cases where it is reasonable to consider the choice between commercial and Federal specifications. Put somewhat differently, we do not believe that a firm which seeks to obtain a solicitation for a study will make a decision about bidding which is to any degree related to its preferences for commercial or Federal specifications. In sum, we believe the factor is influential for some procurements (agencies), but not for others.

Completely analogous facts and arguments can be adduced in connection with the interpretation of the influence of a preference for local procurement on bidding behavior. Obviously a preference for local procurement has meaning only in a context in which the respondent can at least imagine that a given item may be procured either by a number of local installations or by a central agency. These conditions scarcely apply to the procurement of studies or submarines.

On the other hand, basic ordering agreements and options may be used in connection with the procurement of many different items (and in all three agencies). Moreover, there is no way to know how respondents conceived of the alternatives to the use of basic ordering agreements or options, especially in view of the different types of procurement situations involved. For example, an option to extend a contract for a second or third year may have quite different implications from an option to require delivery of either 10 units or 100 units within the term of the contract. The evidence suggests that, as
options and basic ordering agreements were actually used, they tended to inhibit participation, but, even if the evidence is accepted by an agency that wishes to increase participation, it is not clear what the action implications are. It cannot be assumed that potential offerors will view any particular alternative as being preferable to the use of either basic ordering agreements or options.

**Group II: Size of Award**

Earlier we identified the respondents' appraisal of award size as possibly influencing their participation, even though "number of units required" (just) failed to be significant at the required confidence level. For this factor the differences in response by agency were significant, suggesting the likelihood that, at least in some agencies, changes in the size of award might well improve participation — although we have no evidence concerning the desirable direction of change, which may differ from agency to agency.

**Group II: Adequacy of Profit**

There were significant differences between agencies with respect to this factor: in one agency, procuring routine items of hardware, 62% of respondents said profits were inadequate, compared to 33% in another agency. We infer that the perceived adequacy of profit may be a real limitation on participation in one agency, but perhaps not in the others. In the agency in question there is no doubt that price competition was stressed, to the point where it often failed to make awards under formally advertised solicitations, subsequently making awards by negotiation.

**Group II: Competition**

There were significant differences between agencies with respect to a number of responses relating to competition: ability to identify probable
(important) offerors; ability to predict competitors' prices; the extent to which the respondent was encouraged or discouraged by the "number and/or identity of expected competitors"; the belief that "too much competition" importantly limited participation; and the belief that competition is only nominal in many cases. Our judgment is that the impact of competition on participation is strongly conditioned by the "agency" involved — which may mean, in part, the kind of item procured.

Group II: Incentive Contracting

Preferences for incentive contracting did not significantly differentiate agencies. Since this is a Group II factor in any case, we conclude that it does not currently significantly influence participation.

Group II: Multiple Award Schedules

We believe that this Group II factor can be dropped from further consideration, since it did not significantly differentiate agencies. The latter finding is quite surprising, however, in view of the fact that only in one agency were multiple award schedules (which imply the use of commercial specifications) a real possibility. There may have been an unusual degree of respondent ignorance with respect to this item.

Group II: Prequalification of Offerors

There was no significant difference between agencies regarding the prequalification of offerors; and, since it is a Group II factor, we drop it from consideration.

Summary: Implications of Comparisons Between Agencies

There are some factors that probably influence participation in each of the three agencies studied: ability to meet specifications; time available
for bid preparation; adequacy of Government's technical assessment of offers; grouping of items for award; and the costs of bid preparation. For some agencies the following may be important: commercial specifications; local procurement; size of award (number of units); anticipated profit; and anticipated competition, although the relevant dimensions are not clear. Finally, the meaning that should be attached to respondents' preferences regarding basic ordering agreements and option items is obscure, particularly since the perceived alternatives may differ from agency to agency, but we have little doubt that there are underlying factors that significantly affect participation.

3.4.2.3 FACTORS DIFFERENTIATING LARGE AND SMALL BUSINESS

The implication of the summary just given is that, by manipulating certain factors, such as the time available for bid preparation, it is possible to influence participation in bidding: for example, more time (than at present) implies greater participation. In principle an increase in participation may be detrimental to small business, since it could be associated with a reduction in the relative participation of small business — although we would judge this to be an unlikely outcome. The question that therefore arises is whether there is evidence of a differential effect on small and large business, for the factors we have identified as significant.

The answer to this question is clear. While there are a number of respects in which the responses of large and small firms, respectively, differ from each other, they do not differ with respect to any of the factors we identified as influencing participation. For example, the proportions of large and small firms, respectively, that found the time available for bid preparation to be inadequate were not significantly different.

A second illustration may be of particular interest. It may be shown
that preferences for small business set-asides are, as might be expected, significantly different as between large and small firms. However, we lack evidence that such preferences have any impact on participation: the fact is that the preference for set-asides is as strong among non-bidders as among bidders, so we have no reason to believe that bidding behavior can be "explained", to any degree, by such preferences. The failure to find evidence that the use of small business set-asides affects participation does not, of course, demonstrate that such influence does not exist. (We should note, however, that set-asides can be expected to increases awards to small business, to some degree, even if small business participation in the bidding phase is unaffected.)

3.4.2.4 SOME QUANTITATIVE ASPECTS OF BIDDING BEHAVIOR

The number of Federal solicitations obtained varied greatly by respondent: in the preceding 12 months 12% obtained 2 or less, while 15% obtained 250 or more, the median being about 33. In response to these solicitations, 17% submitted 2 or less, while 5% submitted more than 250, with a median of about 13. The median reported offer rate – the ratio of offers submitted to solicitations obtained – was about 0.37, but we know from our study of case files that there was enormous variation in the ratio of solicitations distributed to offers, so that this estimate is no doubt strongly dependent on the mix of cases considered.

Some respondents also made unsolicited offers, but in the prior 12 months 43% made none. About 17% reported either 1 or 2 unsolicited offers, while 5% reported more than 50. Among those who submitted unsolicited proposals the median number was about 5.

The foregoing variables are not significantly related to the bid/no-bid status of the respondent. In other words, knowledge of the number of
solicitations obtained, the number of offers made, or the offer rate does not help to predict or explain the bidding status of respondents, with respect to the cases studied. The "propensity" to submit unsolicited proposals is also unrelated to bidding status.

On the other hand, when analyzed by agency, highly significant differences appear in terms of number of solicitations obtained and number of offers made in response, but there appears to be no relation between agency and the number of unsolicited offers made by respondents. For example, we may characterize respondents from one agency — whose selected procurements dealt mostly with routine hardware items — as obtaining a relatively small number of solicitations and submitting a relatively small number of offers, but with a relatively high ratio of offers to solicitations.

Finally, when tabulated by size of respondent, there are significant differences in terms of both number of solicitations obtained and number of offers made in response, but there is no significant difference in terms of the offer rate. Equally interesting is the fact that there was no observed relation between number of unsolicited proposals submitted and size of respondent.

3.4.3 THE BIDDING PHASE IN BRIEF

A number of factors — such as confidence in technical assessment of offers — have been identified as influencing participation in the bidding phase, but none of them has been shown to differentiate large and small business. It has also been shown that small business is as likely to respond to solicitations obtained as is large business, and is also as likely to submit unsolicited offers. Consequently, changes in policy or procedure that may influence the identified factors (such as technical assessment) cannot be assumed to have a favorable
impact on the relative participation of small business, even given an increase in its absolute participation. As a matter of judgment, however, it seems likely to be the case that, if participation in the bidding phase is increased, the relative participation of small business will also be increased.

While some factors that have potential influence on participation have been identified, the factors themselves do not necessarily imply that any particular change in policy/procedure should be made or even considered. It seems, for example, that a potential offeror who lacks confidence in the technical assessment of his offer is less likely to bid, but the finding does not imply any particular remedial action. Any of the influential factors identified may suggest many alternative policy changes, some of which may be desirable, upon analysis, and others undesirable. Even given acceptance of the findings, then, the task of identifying desirable changes is one which may call for imagination and creativity. We defer presentation of our ideas.

3.5 THE AWARD PHASE

The award phase begins with the receipt of offers by the Government, and ends, at least in principle, when any agreement that may be entered into between a successful offeror and the Government has been carried to its legal conclusion. Thus, for example, the award phase may be considered to include contract performance, contractual amendments, disputes, and so on. In practice, contract administration was not significantly investigated, so that if, for example, small businesses tend to be favored or discriminated against—in, say, the treatment of cost overruns, or in audit agency determinations of allowable costs—the facts would certainly not be known from this study. It is quite possible, of course, that such phenomena have a long-run impact on participation.

Our information regarding the award phase comes partly from study of COOPER AND COMPANY
case files and, perhaps more importantly, from interviews with Government personnel. Unlike the bidding phase, most of our information is non-quantitative, and our findings must be viewed as impressionistic. Nevertheless, we are confident that what we shall say is sound, the only real question being how general some of the reported phenomena should be judged to be.

3.5.1 SOME QUESTIONS

There is, we believe, one dominant question with respect to the award phase: Given that offers are received from both small and large business, what factors, if any, tend to limit participation in awards by small business as such? Of course, in a somewhat broader sense, small business participation in awards could be more seriously affected by phenomena we have described in connection with the pre-bid phase, such as decisions to utilize small business set-asides or sole source, or to make awards by contractual amendments, or otherwise to limit competition; that is, there are some important situations in which there may be no useful distinction between the solicitation phase and the award phase. In any event, the question we address here is whether, when an agency receives offers from both large and small business, in response to a competitive solicitation, it operates in a fashion which encourages or discourages awards to small business.

Secondly, are there differences in behavior between agencies?

Third, what information is available regarding the quantitative aspects of awards, such as size, frequency, etc., especially as related to the size of the participant?

3.5.2 FINDINGS AND CONCLUSIONS

In non-competitive (sole source) situations the award phase is, for
practical purposes, empty, and we therefore restrict consideration to competitive situations, in which a number of offers may be received by the Government. We begin by presenting, briefly, our findings with respect to the quantitative aspects of such offers and awards, and then consider the factors which may influence small business participation in awards.

3.5.2.1 OFFERS AND AWARDS IN COMPETITIVE SITUATIONS

From our study of file information we know that, in advertised, new award situations, the number of offers received by the Government, and between which it must choose, varies greatly from one case to another. Apparently it is quite common, even in situations where a procurement is "formally advertised" and literally hundreds of copies of the solicitation issued, for the Government to obtain no offers whatever for at least some of the items in the solicitation; but it should be recorded that we observed this—many times—in only one of the three agencies (whose cases we have earlier characterized as relating to relatively routine hardware items). Furthermore, there are also many new award situations in which the number of offerors may be only one or two or three. However, there are situations in which scores of offers are obtained.

Our judgment is that the number of offers obtained was strongly related to the nature of the items being procured and their specifications. For example, solicitations for software (studies or services) frequently were associated with many offers. Similarly, solicitations for strictly commercial hardware or supply items, or for inclusion in multiple award schedules, also tended to attract many offers. When, however, the Government called for hardware items—whether nuts and bolts or large systems—that were to be in accordance with Government specifications, it seemed to us that, typically, the number of offers obtained was small.
From our survey of respondents we can throw some additional light on the quantitative side of the award phase. We know that 12% of respondents had obtained 0 awards in the preceding 12 months, and that 24% had obtained only 1 or 2. In contrast, about 11% of respondents had obtained more than 1 award per week. The median number of awards (in 12 months) was about 4.5, which is roughly one-third of the median number of offers submitted — suggesting that, on average, the number of offers per award may have been about 3. It may be noted that our estimate of the median number of awards must, like other estimates, be treated with caution for a number of obvious reasons related to sample selection, the possibility of non-response bias, and so on. In addition, however, this estimate is particularly questionable, because our survey instrument did not define the term "award", so it is not clear how respondents chose to treat (count) such situations as contractual amendments, separate orders obtained under a "requirements" contract, and so on.

As for the value of awards obtained by respondents, 20% of them obtained less than $25,000 each — including the 12% who obtained zero — in the preceding 12 months, while 11% each obtained $10 million or more. The median amount that was obtained was about $500,000 in 12 months, with the median award being around $100,000.

It will come as no surprise that all of the data discussed here, when classified by respondent size, provide statistically significant evidence of the effect of size. In other words, a small firm tends to obtain fewer awards, fewer total dollars, and smaller awards than a large firm. This finding may appear to be an inevitable concomitant of the fact that some contractors are small and others large, but the matter is not so simple. Should we, for example, necessarily expect, in dealing with consumer purchases, that the average purchase from
a local builder — often a small business — will be less than the average purchase
from a (large) grocery chain?

3.5.2.2 FACTORS AFFECTING AWARD

In principle, the factors affecting participation in awards are specified by procurement regulations and in solicitation award criteria. We have already seen that product/service specifications and offeror qualifications may be so selected that only one or a few firms may have any chance of award, and, when this occurs, it may well be to the detriment of small business. However, these restrictions on award are determined prior to solicitation issuance, and, in the award phase, are "givens". What we are primarily concerned with here is how the award process itself actually affects small business participation in awards, given the overt award criteria. We take up, in turn, a number of the more important findings.

Bias Against Small Business

There is an inherent anti-small-business bias in the Government's procurement process, that stems from the attitudes and beliefs of personnel involved in it. In general, those involved in the process, perhaps especially "technical" people, tend to view small business as having inferior capacity. (Recall that it is not procurement personnel who usually dominate.) The belief in the inferiority of small business is expressed in a variety of ways: small business does not have the "breadth" or "depth" of personnel obtainable from large business; they are always in danger of running short of cash; they don't have the "resources" or the "back-up"; if anything goes wrong you can't rely on them to take care of it; some small businesses are "ridiculous", some "bid from a garage", etc; if a small business is good why isn't it big, or why does it need special help in the form of set-asides; "why should I take a chance" on
a small firm; if the research staff was "any good" why would they work for a small firm; they may have a good design capability, or R&D capability, but they just don't have the production follow-through; we like to contract with manufacturers rather than dealers; dealers are "just fronts"; and so on. To be sure, some interviewees strove for a semblance of evenhandedness, and occasionally had a few kind words to say for small business: they are more anxious to please, provide more personal attention, are often "lower cost" ... on every occasion followed by a "but". What is perhaps most troubling about these attitudes is that, even if the generalizations about small business were beyond challenge, they ought to be simply irrelevant: what is relevant are the evaluations of specific, individual, offerors, which are surely not to be inferred from what are, at best, crude half-truths.

In our view these anti-small-business sentiments are strictly job-related: Government personnel tend to see large business as being inherently more capable of helping to meet agency objectives, but just as frequently large business (often well-known business) appears as a much safer choice from a career standpoint. Who can be blamed for selecting the well-established, well-regarded — and large — firm, even if its cost/performance should prove to be unsatisfactory?

We believe these attitudes find their way not only into the award process, but also, as pointed out earlier, into the development of award criteria and other solicitation specifications, as well as "hand lists" of firms to obtain solicitations; and the fact that we discuss this bias in connection with the award phase should not be interpreted as a judgment that it is more important in the award phase than in the pre-bid phase. However, it seems to be essential to make the point explicit in connection with the award phase...
because it may be thought that the existence and application of explicit award criteria would prevent such bias from being effective in that phase. This is not our view, however.

Consider, first, formally advertised procurements, which are often thought of as involving nothing more than being low bidder, to obtain an award. In fact, the evaluator is required to consider "other factors", and to determine that the offeror is "responsible". For example, the offeror must have "adequate" financial resources, and a "satisfactory record" of "performance", "integrity", and "business ethics". Moreover, prices must be "reasonable". These and other factors permit bias against small business (or anyone else). To illustrate: a small business may often be asked to show that it will have the plant capacity to meet all of its commercial and Governmental commitments, but if the business is large the question does not seem to be treated as a significant one - although logically the gap between capacity and commitment may be just as serious in either case.

As a second illustration, consider the situation that arises when the "reasonableness" of the lowest price offered is questioned. Often, it appears, the tests of reasonableness are wholly arbitrary, and themselves unreasonable, as when the low bidder's price was compared with that of the low bidder on a prior procurement - where the latter had chosen not to bid on the current procurement, although no one asked why. Note that this may occur under formal advertising and with the issuance of hundreds of copies of the solicitation. If a determination of unreasonableness is made the formally advertised procurement will be cancelled, and a negotiated procurement undertaken in which "reasonable" may well be interpreted to mean "the lowest the Government can achieve". While we saw no evidence that the prices offered by large business
were more likely to be accepted as reasonable, we believe that the pressure exercised by the Government when procurements are negotiated is much more significant for small business, with limited alternatives, than for large.

Further, there is a clear suggestion, in certain types of cases we saw, of preference on the part of procurement officials for (large) manufacturers over (small) dealers. This preference sometimes manifested itself via a determination of unreasonable price, sometimes in an expressed concern about "assured" source of supply — where the dealer could legally be cut off by the manufacturer, and sometimes even in a change in requirements, when the apparent low bidder was a dealer. Although no one actually articulated it in this way, we suspect that there is a belief, on the part of procurement personnel, that if the Government of the United States wants to purchase Brand Z, it ought to be able to do it directly, without the intervention and mark-up of a "useless" middleman.

If a bias against small business can come into play in awards under formal advertising, it seems obvious that it can do so for negotiated procurements — which, quantitatively, are far more important — where the criteria are generally more complex, and more subjective in application. Perhaps the best single illustration of this occurs in connection with the need to weigh both price (or cost) and the expected quantity/quality of the output. There are many situations in which this need can be manipulated to justify award to a desired source (perhaps partly because it is large). If, for instance, the preferred source has the highest technical score and the lowest price, award will "automatically" be made to the preferred source; but the evaluator can sometimes achieve the same "automatic" outcome merely by judicious choice of the so-called "competitive range".

If, after determination of the competitive range, the preferred
source has both a higher technical score and a higher price, or both a lowertechnical score and a lower price, evaluators may take a ratio of the two; and,if that does not yield a higher ratio for the preferred source, the evaluator can nevertheless say that the difference in quality is (or is not) worth the difference in cost to the Government. If he has both a lower technical score and a higher price, evaluators can ask for "orals" or a "best and final", in which the technical ranking can be reversed—thus restoring the situation in which the game of combining quality/performance and price can be played.

(It may be noted that we have not discussed the technical evaluation process, as such, which is obviously dominated or controlled by technical personnel. This could be a far more common and effective way for anti-small-business bias to be exercised, but we were not in a position to observe this part of the award process.)

Despite what we have just said, Government personnel do freely concede a role to small business, perhaps because they have been conditioned to believe that it is now unacceptable for the record to show an extremely small volume of awards to small business. The "acceptable" role of small business is, naturally, in small awards—for the provision of certain types of services (perhaps including research, but certainly not development), certain types of routine supplies, and other tasks "appropriate" to small business. However, they would "never" consider a small business for a major system award—not even a consortium of small businesses.

In sum, there exists among evaluators a strong anti-small-business bias that is related to the perceived complexity of the items procured, the dollar magnitude of the award, and the possible "middleman" status of the offeror: there are procurements for which an offer from a small business, or
group of small businesses, would be ruled out, no matter what its other attributes. However, even when the specifications are not viewed as absolutely requiring award to a large organization, evaluators still favor them, because they tend to be viewed as providing greater assurance of a successful outcome, and because, in addition, an evaluator often views his personal risks as being lower if he selects a large organization. Even where awards are formally advertised we believe that bias exists.

Other Award Biases

The bias against small business is not the only one that operates in the award phase. Requisitioning personnel often have strong, not openly acknowledged, preferences — even in advance of receipt of offers — that cannot easily be overcome: for example, they may strongly favor an incumbent contractor, especially if they believe performance has been satisfactory; or they may have a preference for a contractor with whom they have had "personal" or "marketing" contacts prior to the solicitation. Indeed, even in the course of the evaluation process itself they may come to prefer a particular offeror, for reasons independent of the overt award criteria.

Moreover, in some agencies it seems clear that awards are most unlikely to be made to any firm which does not already have a "track record" with that agency. There is clearly a bias against new firms (which are usually small, of course), and against old firms seeking to expand to new Governmental areas. The fact that, in some agencies, so much of the budget is effectively committed via prior multi-year awards, means that there is relatively little opportunity for new contractors in any case.

Whatever the reasons for, or sources of, bias, the award criteria are frequently loose enough, in statement or in mode of application, to permit
requisitioner preferences to dominate the award process. The requisitioner may well have a preference for a large firm, as such, over a small one; but, even if he does not, to the extent that incumbency, marketing efforts and prior track record are significant, small firms may be at a disadvantage in the award phase.

Three Qualifications Regarding Bias

First, we believe it is true that the nature and importance of various award (and pre-bid) biases varied considerably from agency to agency. For example, only one of the three agencies stressed the need to have a track record with the procuring agency: if the same sentiment existed in the other agencies it was not volunteered. The apparent manipulation of cost and technical factors seemed significant in two agencies but not in the third. The biases in the third agency, which stressed formal advertising, seemed less significant than in the other two — perhaps because the product/service specifications tended to be standard (that is, carried over from one procurement to another, over a long time interval) so that there was no real involvement of technical people or other "requisitioners" in vendor selection. Marketing was obviously of great importance in one agency, and of no importance (in the award phase) in another. In other words we did not observe, in any one agency, all of the manifestations of bias mentioned here, although anti-small-business statements were made in all three agencies.

Further, to some extent it might be more appropriate to associate particular kinds of biases with particular categories of items procured, rather than with procurement agencies. For example, marketing may be much more important in connection with the procurement of services than of tangible products. Large business may be seen as having an important advantage if the procurement
calls for development and production of some new hardware system. In other words, we do not wish to imply that the observable differences "between agencies" are solely the result of differences in management attitudes or policies: they may bear a strong relation to agency "mission".

The second qualification we wish to make relates to the reasons for bias on the part of evaluators. We do not wish to suggest that, when a requisitioner seeks to have an award made to a particular offeror, it is because he is either capricious or venal, but because he believes it will be in the interests of the agency with which he identifies himself. If it is difficult for him to distinguish between what is good for the agency (for example in terms of risks) and what is good for him personally, he can hardly be blamed. But while we believe that evaluators are generally devoid of moral fault, we also believe that they tend to view procurement regulations as an impediment to the agency's ability to achieve its mission, without recognizing that there may be other long-run "missions" that are Government-wide, which the regulations were designed to help carry out, and for whose achievement they have some responsibility.

The third qualification that it may be important to express is that, although we characterized the award phase as having a number of elements of anti-small-business bias, it is not our intent to imply that anything that can be done by a large firm can be done equally well by a small firm (or vice versa). We believe, in fact, that there may be many procurments, accounting for a large fraction of total procurement expenditures, which cannot be satisfied by any existing small firm, or, perhaps, by any combination of small firms; and, while this may be both undesirable and avoidable, it is not the "bias" we have in mind. We use the term "anti-small-business bias" to mean that, even if a small and a large offeror were equally capable of meeting a Government requirement, award
would be more likely to be made to the large firm.

Subcontracting Awards and PL 95-507

Many of the Government personnel with whom we discussed the problems faced by small business in obtaining subcontracting awards tended to believe that these problems were taken care of by the enactment of PL 95-507, although we also obtained the impression that the question of small business participation in such awards was not one which had high priority, or to which they had given any great thought. In effect, we think, this group assumed that since the subcontracting problem had obtained some Congressional attention there was no need for further concern.

However, some who, we judged, were closer to the problem, were sceptical about the effectiveness of subcontracting plans, viewing them as mere formalities, without follow-up or enforcement capability on the part of the Government. In fact, some expressed the opinion that approved subcontracting plans merely codified that which the prime contractor had intended in any event, on the basis of his appraisal of his self-interest; and, to the extent that plans went beyond this, they would remain plans and nothing more. It was pointed out that the Government's contracting officers had the same problem with subcontracting plans as they had with set-asides: namely, to determine the extent to which it was appropriate for them to require or even permit higher costs of procurement to achieve a "social" objective.

One small business specialist expressed the view that little or nothing could be accomplished via PL 95-507, to increase subcontracting, until procurement officials were not merely permitted, but mandated, to direct that subcontracts be awarded to specified subcontractors, small businesses, minorities, etc., in
specified amounts. However most of those with whom we discussed this idea did not accept its feasibility, partly because contracting officers lacked the necessary technical expertise to deal with problem of interface between the subcontractor and the prime contractor, but more importantly because the prime contractor would be "off the hook" if anything should go wrong.

Our own judgment is that little should be expected from PL 95-507. Further, we do not believe that there is any really feasible method by which the Government could, under present circumstances, induce prime contractors to award more subcontracts.
4 RECOMMENDATIONS

4.1 INTRODUCTION

The recommendations which are made below could, with one exception requiring Congressional action, be implemented by decision of the head of any agency that has a substantial procuring activity of its own, such as some units of the Army or Navy. To that extent our recommendations are addressed to such officials. However, the implementation of almost any of our recommendations would require the utilization of resources—for example, for experiments—and our experience in conducting this study suggests that it is unlikely that many agencies will volunteer to expend resources on the grounds that it will help small business. Consequently our recommendations are stated as if it will be necessary for SBA to take a leadership or advocacy position. Such leadership might take the form of initiating contact with selected agencies, securing their agreement to participate, and perhaps funding or partially funding some cooperative activities.

In what follows we have chosen to organize our recommendations in a sequence that reflects our judgment as to potential payoff—the most important recommendation first. In this context, "payoff" should be understood to have at least two components: more award dollars to small business, and improved cost/performance of the items procured.

4.2 PRODUCT/SERVICE SPECIFICATIONS

4.2.1 BREAKOUT

We have seen that firms, whether small or large, tend not to bid unless they believe they can meet the product/service specifications laid down in solicitation documents. We also know that many procurements, involving very
large numbers of dollars (individually and collectively) have product/service specifications which either cannot be met by any small firm or consortium of such firms, or which Government evaluators would consider small firms incapable of meeting if they had the temerity to submit an offer. These procurements are frequently of the large system, multi-year, multi-option variety. In short, a very large number of procurement dollars are, currently, effectively "set aside" for large business, often with little competition.

Much that is said about procurement and small business is based on the (usually implicit) assumption that there is something sacrosanct about the Government's product/service specifications, whatever they happen to be. In fact, however, specifications tend to be dictated by tradition or precedent and -we suspect - by what it is easiest for Government personnel to do, rather than by assessment of costs and benefits. What is it, for example, that dictates whether individual Government procurements should deal with ships, ship systems, or components? Why is it that, to administer payments to Social Security retirees, the Government hires personnel, leases space, procures equipment, etc., while to make payments under Medicare it procures the services of organizations which will, in turn, hire personnel, procure equipment, and so on? It is obvious that such choices by Government have the profoundest implications for the participation of small business; and we note that while large firms may be the only ones or the best ones to supply system X, small firms may be the best ones to supply the subsystems A, B, C and D, which go to make up the system X.

We use the term "breakout" to designate the direct procurement by the Government of subsystems A, B, C and D, rather than X. Since breakout may yield lower cost and/or higher performance of procured items, even including administrative costs, it may not be necessary to justify breakout on the basis of small
business participation. Moreover, because large system procurements are often confined to a very few offerors, at least in part as a result of prior Government awards, it is not unlikely that a long-term commitment to breakout would substantially increase competition and the amount of productive capacity that is capable of being directed to the Government's needs.

In our view, breakout constitutes, potentially, the single, most important mechanism for increasing the procurement dollars to small business. However, it seems likely that, at least for some agencies and procurements, breakout cannot be carried very far, because of the additional Governmental management effort it requires, that is, because of the absence of qualified personnel. (Logically, these additional management costs should be offset by a corresponding reduction in system management costs incurred by contractors.) This raises the serious question of how many, and what kinds of personnel would be needed by a Government agency to implement breakout. Moreover, there are no automatic or obvious answers to the related question of how far breakout should be carried, that is, to the question of the appropriate "level" of Government procurement: applied indiscriminately, in fact, breakout might reduce small business participation and/or yield less desirable products/services for any given expenditure. Thus, while we are prepared to assert that breakout, properly implemented, is likely to be good for the country and good for small business participation, we have no present basis for saying under what conditions breakout should be used, or to what extent, or what it would require in personnel.

We might, then, recommend an extensive and expensive study of breakout, involving the development of the relevant theory, the conduct of the corresponding field work in many procuring agencies, the creation of principles and procedures of application that would determine the procurement level to be used.
in individual cases, the specification of Government personnel requirements, and so on. At the end of this hypothetical study new breakout-related procurement regulations would be prepared and implemented. We think so little is presently known about the problems and opportunities associated with breakout that such a study effort would be quite likely to fail, perhaps killing the concept for years to come — although even a highly imperfect outcome would be an improvement, no doubt, over the current "system" for the determination of procurement level. On the whole we think it would be better to learn to creep, before we try to run.

We recommend that SBA seek to promote the development and utilization of breakout principles and practices. Given SBA's limited resources and our ignorance of the magnitude of payoff, practical limitations, etc., associated with breakout, it is recommended that SBA seek the cooperation of a single agency, such as an appropriate element of the Army, Navy or Air Force. An "appropriate" element is one that currently acquires substantial "systems" — as opposed, for example, to one whose function is to deal with spare parts. (Breakout could be applied to spare parts, of course, but this may be an unpromising application from the standpoint of small business.) The cooperating agency would provide an opportunity for the practical development of the breakout concept, including appraisal of the costs, benefits, administrative requirements, application problems, and so on. Cooperation should be sought not as a favor to small business, but on the grounds that it is highly unlikely that current procurement "levels" are best from the standpoint of agency mission achievement. If the results of this effort were sufficiently promising SBA would be in a good position either to urge the voluntary adoption of breakout by other agencies and to provide some guidance on implementation, or to press for changes in procurement regulations (based on additional study) that would require greater use of breakout.

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To begin implementation of an exploratory effort in a cooperating agency it is suggested that a single real system, that would ordinarily be procured as such, be selected for breakout and study. Even this initial step may well be impossible without the help of a contractor, because of the nonavailability of agency personnel with relevant backgrounds. The contractor would ensure that breakout had been carried far enough to permit (but not necessarily require) a substantial portion of the procurement dollars to be awarded to small business, and would assist in the preparation of subsystem procurement specifications that meet the need for system integration. The study contractor would monitor the subsystem procurement process, the progress of the work done by the subsystem contractors, and any problem of integration that may arise. (Integration problems arise even with system contractors.) The study contractor would also be required to estimate acquisition cost on a total system basis, versus acquisition cost using breakout; the Government's in-house costs and personnel requirements associated with the alternative acquisition strategies; differences in design/performance associated with the alternative strategies; and problems of implementation of breakout, including approaches to their solution.

4.2.2 OTHER PRODUCT/SERVICE SPECIFICATIONS

There is strong evidence that participation in the bidding phase may be influenced by the grouping of items for award, and, at least in some types of cases, by the size of the award (number of units). However, we have no evidence from this study as to the groupings or sizes of award that would tend to yield high or low participation; nor is there any particular fact suggesting that, by these means, the participation of small business can be increased compared to that of large business — although we are prepared to accept this latter
proposition on faith until there is evidence to the contrary.

For some categories of procurements there is a possibility of systematic investigation of the effects on participation of alternative award sizes and groupings, namely, where the items to be procured are sufficiently well-defined to permit formal advertising and are repetitively procured. (In other types of cases, our judgment is, the problem of isolating the effects of these specific variables probably cannot be solved.) Since a relatively small fraction of procurement dollars, probably, are spent in this way, and since it is in this type of procurement that small business may already be relatively well-represented, the prospective improvement in small business participation must also be relatively small, so that we recommend only a modest effort to investigate these matters.

Specifically, we recommend that SBA seek to secure the cooperation and participation of an agency which has a substantial volume of procurements, a high proportion of which are formally advertised. It is proposed, further, that a contractor be obtained to analyze existing data on grouping, award size and participation, and, since this is unlikely to yield reliable results, to design and analyze the results of experiments on grouping and size of award. These experiments would each involve the random assignment of procurements to a "control" or "experimental" group. In the control group procurement would be carried out in the same way as at present, while in the experimental group there would be deliberate manipulation of award sizes (or, in the other experiment, groupings). A superior alternative, for the experimental group, might be to remove, from solicitations, all restrictions on quantities and groupings, except the maximum amount of each item the Government wishes to purchase, so that it might be possible to make inferences from the free choices exercised by offerors. In any event, by careful design, observation and analysis, with a large enough
sample of procurements, it should be possible to reach meaningful conclusions about the impact of award size and grouping on small and large business participation, as well as procurement costs, administrative costs, and so on. It could turn out to be true, as in the preceding case, that what's good for small business is good for the country.

4.3 SMALL BUSINESS SET-ASIDES

It is recommended that the current system of small business set-asides be abandoned. It creates hostility; it is costly to administer; and it is not obvious that it accomplishes very much for small business. There is no evidence that set-asides encourage small businesses to bid; nor is it clear to what extent set-asides are used in situations which would in any event have resulted in award to small business. Nevertheless, we would not recommend abandonment if we were not persuaded that there is a superior alternative.

Under the alternative, small and large offerors would be permitted to compete against each other in every procurement situation, but "special consideration" would be given to small business in the award process. For a formally advertised procurement all that would be required would be the determination of a size standard, and the use of a percentage price differential, so that a bid from a business classified as small would be preferred to a bid from a large business if it exceeded the latter by less than x%. The value of x could be set by statute or procurement regulation, and could have either a unique value or a value that was dependent on the industry or other factors—such as an assessment of the need to increase competition in a given procurement area, or the dollar value of the award.

The provision of "special consideration" would, of course, be more complex in situations where it is necessary for the Government to consider the
technical aspects of the offers made, before selecting the successful offeror. Below we shall recommend, for totally independent reasons, a thoroughgoing review and revision of the evaluation process, and it is our expectation that this will, among other things, yield a procedure for quantification of the overall merit of each offer, taking account of both price (or cost) and technical factors. Given the existence of such a procedure, the special consideration for small business could take the form of a differential in the overall figure of merit. It would also be possible to give special consideration in the form of separate price and technical differentials, but this system is so abused currently—as our findings make clear—that we are most reluctant to condone it. As with awards based on price alone, the differential in the overall merit figure which would require award to small business, could, like the definition of "small", be made to depend on the industry or other factors.

Presumably a change such as that here recommended would require Congressional action. However, before SBA urges such action, it seems desirable to have the specifics of the recommendation in place. In particular, procedures for the use of an overall figure of merit should have been developed, as discussed below, and SBA itself should develop recommendations on the magnitude of the special consideration to be accorded small business—including the role, if any, of size standards and other differential by industry. A related task which should be undertaken by SBA is the design and development of mechanisms, to be recommended to the Congress, which would make it possible to modify the magnitude or other aspects "special consideration", in the light of changing conditions.

4.4 EVALUATION PROCESSES AND ORGANIZATION

It is clear that many offerors lack confidence in the Government's
assessment, especially its technical assessment, of their offers; believe that competition is nominal, and that some have an "inside track". Study of files makes it clear, also, that where technical assessment is required, awards are often made on a quite arbitrary basis, and that bidders' lack of confidence in evaluations is quite justified. Finally, we are convinced that current evaluation processes work to the detriment of small business, because of anti-small-business bias and other factors.

There is no doubt in our mind that change in evaluation processes is highly desirable, or that we could recommend specific changes that would improve them. However, the fundamental changes that are called for are unlikely to be adopted without a study that is specifically directed to the evaluation problem, particularly since some of the specifics of an improved evaluation process will undoubtedly depend on the agency involved. We urge SBA, as an advocate for small business, to seek to initiate a study that would be conducted in two parts — the first part to be conducted in a single cooperating agency which might be induced to co-sponsor or even sponsor it, since it would be an immediate beneficiary. The cooperating agency should be one whose procurement is dominated by negotiated awards involving both technical and cost evaluation, and which has a high volume of awards. The study would involve all aspects of evaluation, and would, among other things, require the development of a factual foundation that encompassed past cases and current evaluation processes and organization.

More specifically, the first part of the recommended study would involve the following: (1) review of prequalification criteria, as well as evaluation criteria, used in connection with a large sample of procurements, with particular attention to their relevance; restrictiveness, completeness, weighting and public disclosure; (2) review of evaluations of offers received in connection
with the selected sample, with particular reference to the role of the solicitation criteria, the procedures used to evaluate each offer in terms of each of the criteria, procedures used to combine scores on each criterion, the role of criteria not in the solicitation, the establishment of the competitive range, the role of "best and final" offers and other written responses, the role of oral presentations, the utilization of information that is independent of that provided by offerors, and the competence/qualifications of the evaluators to score each criterion; (3) quantification, to the extent possible, of the various types of bias that may be found to exist — incumbents, large business, non-profit organizations, personal contact, and others; (4) review of procedures for the establishment of solicitation and prequalification criteria; (5) study of evaluation organization, including the selection of evaluators and their qualifications, the role of technical evaluation and other committees, the role of the project/program director or administrator, the role of the contracting officer and/or contract specialist, and the time required to conduct evaluations; (6) review of post-award feedback to offerors, with particular attention to its accuracy, completeness, timeliness and usefulness; (7) recommendations, if justified, regarding personnel, procedures and organization for (a) selection of evaluation criteria, (b) implementation of the evaluation process, (c) provision of information to the public regarding evaluation criteria and processes, and (d) post-evaluation feedback to offerors.

The second part of the recommended study would be an effort of some kind to encompass all procuring agencies, but the nature of this effort will obviously depend on what is learned. Indeed, it is even unclear at this time whether broad change should be attempted by Congressional action, via change in procurement regulations, or by approaches to individual agencies.

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4.5 INFORMATION DISSEMINATION

We have seen that the costs of preparing offers inhibit participation in bidding. We also know that award sometimes depends on marketing activities. Although we have no evidence from this study that these phenomena are more important for small firms than large ones, our judgment is that a reduction in bidding costs, or in the influence of marketing activities, would almost certainly be to the advantage of small business. We also believe, for a variety of reasons, that such changes would be desirable even if large and small firms were to be affected equally.

In our view a principal "cause" of high bidding costs, and of the time required for bid preparation, is that it is often difficult and time-consuming for offerors to obtain the information required. Further, a principal factor in undertaking marketing activities, and one of the reasons that marketing does have an impact on awards, is that the marketer may obtain relevant information that is not necessarily made available to others. We also believe that, by restricting the relevant information that is made available with solicitations, Government personnel/agencies sometimes deliberately encourage the restriction of competition, so that an incumbent or some other offeror will be favored. By undertaking appropriate information dissemination activities the Government can reduce the cost of bidding, the time required, the influence of marketing activities, and both the perception and the reality of the "inside track".

There are two principal types of information dissemination that the Government ought to employ to a far greater extent than it now does, although it is not clear where the line should be drawn between them. The first consists of the solicitation itself, and of any information which may accompany it. The second consists of what, for brevity, may be called "program" information.
Although there are major differences between agencies, our judgment is that, in most instances, too little information is distributed in or with solicitations. Note that, when too little information is provided, the potential offeror must seek the information for himself, often at high cost—if it is obtainable at all. The information distributed should cover the background of the solicitation and the circumstances giving rise to it; the preferences of Government personnel with respect to approaches, designs, dimensions, or other product/service properties; related work and state-of-the-art description; how the product/service fits into a larger framework of product/service acquisitions, both past and future; and any other information which will help to make clear what the Government really wants—and the extent to which it knows what it wants.

Greatly increased distribution of program information, by the Government, is also called for. By definition, such information would not be geared to any specific solicitation, but would be designed to provide appropriate background and perspective for responding to solicitations, or, perhaps, generating unsolicited proposals. Such information would address questions of program philosophy, objectives and priorities; agency procurement and related plans for the period, say, 6-18 months ahead; changes in organization and operation; ongoing and completed studies; etc. Dissemination of such information should be accomplished through distribution of written materials, perhaps supplemented by group meetings (semi-annually, perhaps) at which questions might be asked by potential offerors.

Obviously, there is no limit to the amount of information which some may call for, of either type, and there is certainly no general rule that will properly determine whether any given piece of information should or should not be disseminated, since dissemination is not free. We are convinced, however,
that a great deal of the appropriate information is routinely generated for other purposes, in some written form, so that the marginal cost of implementation is probably quite low, particularly when account is taken of the fact that such information dissemination would make it possible to reduce the great amount of time now spent in responding to individual inquiries, meeting with contractors on a one-to-one basis, and so on.

We believe it would be useful to many agencies if a model information-dissemination-for-offerors program were to be set up, assuming that there were some adequate way to reach them and convince them of the importance of conducting such activities. SBA should, we believe, seek out an agency that would be willing to sponsor such development, perhaps via a contractor, for its own use. (The agency should be "sold" on the grounds that it is good for the agency and good for offerors—not on the grounds that it will help small business more than anyone else: we suspect the latter is not a popular argument in major procuring agencies!) While such a model program could not really be applied to any other agency, it may help provide some leadership and some ideas, and be useful in a promotional sense.

A second type of activity which we urge upon SBA representatives is the review of solicitations from the standpoint of information dissemination. Such review would soon make it apparent to SBA, we believe, that the behavior/policies of some agencies are (literally, perhaps) designed to conceal, and are, in any event, absurd from the standpoints of encouraging participation or reducing bidding costs. We are not recommending that SBA seek to improve the information available to offerors after individual solicitations have been distributed, but rather that it use its observations of solicitation practices as a basis for approaching particular agencies and seeking change.
There is substantial evidence that interested offerors are not obtaining copies of solicitations to which they may wish to respond. If we believed that the problem was general (Government-wide) we would give it high priority for attention, but the truth is that it seemed serious in only one of the three agencies studied, and we do not know what to expect in other agencies. There is also the fact that there are many possible, not-mutually-exclusive, explanations of the observed phenomenon. In the circumstances, the only appropriate course seems to be to recommend further study.

It is recommended that SBA sponsor a study, to be conducted in a number of agencies, of the policies, procedures and practices affecting solicitation issuance, including those cases in which no solicitation is issued. The recommended study would cover policies and practices relating to: (1) the development and utilization of bidders' mailing lists; (2) the use made of such lists in connection with specific solicitations; (3) the development and use of "hand" lists of bidders; (4) meeting requests for copies of specific solicitations; (5) implementation of regulations governing non-competitive awards; (6) implementation of regulations governing synopsis; and (7) timeliness of receipt of solicitations. The study would seek to determine whether the participation of potential offerors was being restricted unduly, and might have to go beyond the items listed. For example, "urgency" may legitimately be invoked as a reason for non-synopsis, but it may be that, in some cases, urgency exists only because of other weaknesses in agency operations, such as repeated failure by technical personnel to initiate procurement requests on time.

If, on the basis of this study, it appears that there are widespread problems, the study would recommend an approach on a Government-wide basis.
4.7 TIME FOR SUBMISSION OF OFFERS

We are convinced that the time allowed for submission of offers is sometimes inadequate, from the standpoint of participation; and there is some reason to believe that small business may tend to be at a relative disadvantage in this respect. To the extent that potential offerors must rely on the mail — for the Commerce Business Daily, to request and obtain solicitations, to submit offers — they may be particularly disadvantaged by an insufficiency at any stage of the solicitation process.

It is recommended that the time permitted for submission of offers be routinely set at 45 days from the actual date of issuance (mailing) of the solicitation. This increase in time might be very important to a potential offeror, yet would hardly make a difference in the overall length of the procurement process.

There are two ways in which such a change may be brought about. One way would be by changing procurement regulations; however, we do not consider that we have amassed enough statistical evidence to make this approach viable. The alternative is to seek to have individual agencies adopt the recommendation, particularly since the amount of the increase in time that we have recommended is purely judgmental. (It would be possible to study this formally, but we do not believe it is worthwhile.) If, therefore, changes are to be made, in the near future, in the time permitted for submission of offers, it appears that it will require the advocacy of SBA.

4.8 TYPE OF AWARD

Our evidence strongly suggests that, in particular agencies, the "type of award" may influence participation. In particular, agencies which are
in a position to use more commercial (rather than Federal) specifications, or to use more local (rather than central) procurement, may tend to increase participation by doing so. Similarly, participation may be increased by reducing the use of basic ordering agreements or of option items, although the alternatives are unclear. However, changes in any of these factors are likely to affect many things besides participation: for example, a change from Federal to commercial specifications must have implications for users (in terms of product characteristics and budget, for example), so that it is clear that it would be improper to recommend implementation on the basis of this study alone.

Further, our judgment is that the overall impact on small business of such changes, in terms of dollars of award, is not likely to be substantial enough to justify the great additional effort that would be required to be able to recommend implementation of a change. On the other hand, the findings do suggest that, when choices are made between commercial and Federal specifications, etc., account should be taken by decision-makers of the likely impact on participation; and this may justify some study, in important cases.
APPENDIX A

FORMAL
DATA COLLECTION INSTRUMENTS
Under a U. S. Government grant (No. SB-IA-00010-01-0) we are conducting a study to identify factors that importantly affect the participation of business in Federal procurement. A small number of past procurements have been selected for follow-up.

One of these cases is identified in the enclosed questionnaire, which we are sending to you because your organization apparently participated in that procurement, and we would like to gain as much understanding as possible about the factors surrounding your participation. Please note that we need your help no matter what the size of your organization. We ask that the questionnaire be completed by the person responsible for the decision to participate.

Your response will be held in absolute confidence and will not, under any conditions, be made known to anyone else, even to the Government's project monitor, who is identified on the enclosed reproduction. Consequently, the questionnaire should be returned directly to us.

Because we can study only a small number of cases, your cooperation is very important to the success of the project, and, ultimately, to the improvement of Government procurement processes. The questionnaire will not require much time to complete, and you may even enjoy it!

I shall be most grateful for your prompt response. Please do not hesitate to call me if you have any question about the project or questionnaire. If you might be interested in obtaining a copy of the project report, this can be indicated in the appropriate part of the questionnaire.

Sincerely,

President
Under a U. S. Government grant (No. SB-1A-00010-01-0) we are conducting a study to identify factors that importantly affect the participation of business in Federal procurement. A small number of past procurements have been selected for follow-up.

One of these cases is identified in the enclosed questionnaire, which we are sending to you because your organization apparently did not bid on that procurement, and we would like to gain as much understanding as possible about the factors surrounding your non-participation. Please note that we need your help no matter what the size of your organization. We ask that the questionnaire be completed by the person responsible for the no-bid decision.

Your response will be held in absolute confidence and will not, under any conditions, be made known to anyone else, even to the Government's project monitor, who is identified on the enclosed reproduction. Consequently, the questionnaire should be returned directly to us.

Because we can study only a small number of cases, your cooperation is very important to the success of the project, and, ultimately, to the improvement of Government procurement processes. The questionnaire will not require much time to complete, and you may even enjoy it!

I shall be most grateful for your prompt response. Please do not hesitate to call me if you have any question about the project or questionnaire. If you might be interested in obtaining a copy of the project report, this can be indicated in the appropriate part of the questionnaire.

Sincerely,

President
Under a grant from the U. S. Small Business Administration (No. SB-IA-00010-01-0) we are conducting a study of factors affecting small business participation in Federal procurement. A number of past procurements have been selected for study, to help us identify the factors that are really significant.

One of these cases is identified in the enclosed questionnaire, which we ask you to complete. We are sending the questionnaire to a small number of firms, some selected because they participated in that procurement and some because they did not. We would like to gain as much understanding as possible about the factors surrounding your participation or non-participation. Because we can study only a small number of cases the cooperation of every firm contacted is of the utmost importance.

Your responses will be held in absolute confidence, and will not, under any conditions, be made known to anyone else, even to the Government's project monitor, who is identified in the enclosed letter. Consequently, the questionnaire should be returned directly to us. Please note that your help is needed regardless of the size of your organization, since it is necessary to determine what differences exist between the responses of large and small organizations, respectively. The questionnaire will not require much time to complete, and you may even enjoy it!

I shall be most grateful for your prompt response. Please do not hesitate to call me if you have any question about the project or questionnaire. If you might be interested in obtaining a copy of the project report, this can be indicated in the appropriate part of the questionnaire.

Sincerely,

President
Under a Federal grant we are conducting a study designed to improve participation in Government procurement.

We would greatly appreciate your help in carrying out this undertaking, as detailed in the enclosure.

Sincerely,

President
MEMORANDUM

FROM:

SUBJECT: Grant No. SB-1A-00010-01-0

Under the above grant COOPER AND COMPANY is conducting a study to identify factors that importantly affect participation in Federal procurement. A small number of past procurements have been selected for examination.

One of these cases is identified in the enclosed questionnaire. We are contacting your organization, which was selected because it was identified as a potential participant in that particular procurement, to gain as much understanding as possible about the factors surrounding your participation or non-participation. Please note that we need your help no matter what the size of your organization. We ask that the questionnaire be completed by the person responsible for the participation decision. If the procurement was in an area that is of no interest to your organization, the questionnaire should be completed by an official familiar with your general participation (if any) in Government procurement.

Your response will be held in absolute confidence and will not, under any conditions, be made known to anyone else, even to the Government's project monitor (who is identified in the enclosed SBA letter). Consequently, the questionnaire should be returned directly to:

COOPER AND COMPANY
Stamford, CT

Because we can study only a small number of cases, your cooperation is very important to the success of the project, and, ultimately, to the improvement of Government procurement processes. The questionnaire will not require much time to complete, and you may even enjoy it!

I shall be most grateful for your prompt response. Please do not hesitate to call me (at ) if you have any question about the project or questionnaire. If you might be interested in obtaining a copy of the project report, this can be indicated in the appropriate part of the questionnaire.
To Whom It May Concern:

This is to advise you that the Small Business Administration has awarded a grant to

COOPER AND COMPANY
Stamford, Connecticut

to fund a research study entitled "Factors Affecting Small Business Participation in Government Procurement." The research plan for this project involves the selection and intensive study of a small number of past procurements, from the standpoint of the behavior of both Governmental participants and suppliers. The suppliers of interest are actual and potential participants, whether large or small.

The grantee has undertaken to maintain complete confidentiality of all information obtained from suppliers. The grantee will not identify individual respondents or responding organizations.

SBA Grant No: SB-1A-000010-01-0
Project Period 9/15/80 to 8/14/81
QUESTIONNAIRE

PARTICIPATION IN FEDERAL PROCUREMENT

This questionnaire should be answered on behalf of your organization by the official responsible for deciding whether or not to bid on the procurement identified in the next paragraph. If your organization is a subsidiary (or independently operating division) answer only on behalf of the subsidiary or independent division. The questionnaire is in three parts. The first deals with a particular Federal procurement. The second is based on your experience with Government procurements and solicitations in general. The third calls for information about your organization, to help us classify your responses to the first two sections.

PART I

This section concerns a solicitation issues by the Department of Finance, Supply Services Command, identified as XYZ-AB-00000, which was due on 10/10/80, and covered requirements for pencils and penicillin during a one-year period.

In responding to this section it may be helpful to have available any records regarding the solicitation, such as the Government's solicitation document. Whether or not you have such records, please respond to the best of your knowledge and belief.

Where appropriate, please use check marks (✓) to indicate your answers. If you need to qualify your answer for any reason—for example because your answer applies only to some items in the solicitation—or need more space for explanation, please use the other side of the page, identifying the question by number.

1. If your organization had been aware of this solicitation would there have been any interest in seeing it? Yes ___ No ___ If "No", please indicate reasons on reverse.
2. Was your organization aware that a solicitation had been issued? Yes ___ No ___ Don't know ___ If "No" or "Don't know" go on to Part II.
3. How did your organization become aware that a solicitation had been issued? (Check more than one, if appropriate).
   - Commerce Business Daily
   - Personal contact (employee)
   - Bidders' mailing list
   - Washington area rep.
   - PASS
   - Other (specify)
4. Did your organization request a copy of this particular solicitation? Yes ___ No ___ Don't know ___
5. Did you actually obtain a copy of this solicitation? Yes ___ No ___ Don't know ___ If "No" or "Don't know" go on to Part II.
6. Was it obtained soon enough to respond? Yes ___ No ___ Don't know ___
7. Is a copy of this solicitation available to you now? Yes ___ No ___
8. Was the solicitation of sufficient interest to read the specifications? Yes ___ No ___ If "No", please state reasons on reverse, and then go on to Part II.

COOPER AND COMPANY
9. Regarding only the solicitation identified above, indicate whether each statement below is true or false. If you have no opinion, or the item does not apply, leave the item blank.

<table>
<thead>
<tr>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The product/service and delivery specifications were clear and consistent. (Identify on reverse the specs that were unclear or inconsistent.)</td>
<td></td>
</tr>
<tr>
<td>B. Other requirements (such as subcontracting, &quot;disputes&quot; clause) were clear and consistent. (Identify on reverse other requirements that were unclear or inconsistent.)</td>
<td></td>
</tr>
<tr>
<td>C. Time available for submission of offers was adequate.</td>
<td></td>
</tr>
<tr>
<td>D. We could meet all required product/service specifications.</td>
<td></td>
</tr>
<tr>
<td>E. We could meet all required delivery date(s).</td>
<td></td>
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<tr>
<td>F. We could meet all other requirements (such as size standards, financial responsibility, experience).</td>
<td></td>
</tr>
<tr>
<td>G. We could identify the probable (important) offerors.</td>
<td></td>
</tr>
<tr>
<td>H. We could make good predictions of prices in competitive offers.</td>
<td></td>
</tr>
<tr>
<td>I. We could make good predictions of product/service aspects of competitive offers.</td>
<td></td>
</tr>
<tr>
<td>J. We could confidently predict successful offeror.</td>
<td></td>
</tr>
<tr>
<td>K. We had confidence that technical assessment of offers would be adequate.</td>
<td></td>
</tr>
<tr>
<td>L. We had confidence that cost assessment of offers would be adequate.</td>
<td></td>
</tr>
<tr>
<td>M. We had confidence that award would be based entirely on stated criteria.</td>
<td></td>
</tr>
<tr>
<td>N. We believed that award would be made within the time specified in the solicitation.</td>
<td></td>
</tr>
</tbody>
</table>

10. Indicate for each of the following whether it tended to encourage you to bid, or discourage you from doing so. If item had no influence, so indicate. If it appears inapplicable, or you have no opinion, leave blank.

<table>
<thead>
<tr>
<th>Encourage</th>
<th>Discourage</th>
<th>Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The grouping of goods/services for award purposes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. The probable size of the award (dollars)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. The number of units required</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Contract pricing (fixed price, cost-type labor-hour, incentives, etc.). Detail on reverse.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
II. Type of competition (formally advertised, competitive price negotiation, competitive technical negotiation, multiple award, etc.). Detail on reverse.

F. Type of award (definite or indefinite quantity, multi-year, task order, etc.). Detail on reverse.

G. Set-aside requirements (if any): Small business Labor surplus area Other

H. Criteria of evaluation of competing offers.

I. Other terms of the solicitation (subcontracting plan, defective pricing, etc.). Detail on reverse.


K. Costs of preparing bid.

L. Number and/or identify of expected competitors.

M. Terms of anticipated competitive bids.

N. Success (awards) rate experienced in prior offers of this type.

O. Success (awards) rate experienced in all prior offers as a group.

P. Anticipated business conditions.

Q. Other factors (specify)

11. Did you make an offer under this solicitation? Yes __ No __

The principal factors in this decision:

12. If you made an offer under this solicitation,

A. Was it disqualified for any reason (such as late bid)? Yes __ No __

If yes, please describe the reason:

B. What were the costs of preparing and submitting the offer?

Initial offer? __ manhours at $ __ per manhour (exclusive of overhead) plus $ __ out-of-pocket

Follow-up (if any): __ manhours at $ __ per manhour (exclusive of overhead) plus $ __ out-of-pocket

COOPER AND COMPANY
PART II

The questions in this part pertain to your general experience with, and views on, Federal procurement and subcontracting.

1. Have you had any experience with
   A. Federal solicitations? Yes __ No __
   B. Submission of offers to the Federal Government? Yes __ No __
   C. Submission of offers to prime Federal contractors? Yes __ No __
   D. Obtaining awards from the Government or its prime contractors? Yes __ No __

If "no" to all parts of the question, please indicate the reasons as fully as possible on the reverse. Then go on to Part III.

2. What do you see as important factors tending to limit your direct participation in Government solicitation/award processes?
   A. Cost of marketing or of obtaining adequate information about the market Yes __ No __
   B. Deficiencies of solicitation documents Yes __ No __
   C. Unnecessarily restrictive product/service specifications Yes __ No __
   D. Costs of preparing offers Yes __ No __
   E. Inadequate safeguards for proprietary information Yes __ No __
   F. Inadequate or unfair Government assessment of offers Yes __ No __
   G. Too many additional restrictions on operations (specify on reverse) Yes __ No __
   H. Risks associated with acceptance of a Government contract Yes __ No __
   I. Inadequate profit on Government business Yes __ No __
   J. Danger of dependence on Government Yes __ No __
   K. Too much competition Yes __ No __
   L. Procedures for establishing allowability of costs Yes __ No __
   M. Procedures for establishing acceptability of product/service Yes __ No __
   N. Some organizations have an "inside track" Yes __ No __
   O. Obtaining Government awards requires special skills Yes __ No __
   P. Obtaining substantial Government business requires dishonesty Yes __ No __
   Q. Obtaining Government business involves too much diversion of executive attention from other markets Yes __ No __
   R. Specify on reverse other factors which are important in limiting your participation in Government procurement.
3. What do you see as important factors tending to limit subcontracting in connection with Federal procurements?

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>A. Prime contractors do not wish to subcontract</td>
<td>Yes  No</td>
</tr>
<tr>
<td>B. Government requirements imposed on potential subcontractors are too onerous</td>
<td>Yes  No</td>
</tr>
<tr>
<td>C. Subcontracting opportunities are too unpredictable</td>
<td>Yes  No</td>
</tr>
<tr>
<td>D. Subcontractors must reveal confidential/proprietary information to prime contractors</td>
<td>Yes  No</td>
</tr>
<tr>
<td>E. Difficult for prime contractors to identify competent subcontractors</td>
<td>Yes  No</td>
</tr>
<tr>
<td>F. Difficult for potential subcontractors to track opportunities and/or market their capabilities</td>
<td>Yes  No</td>
</tr>
<tr>
<td>G. Subcontractors with required capabilities often do not exist</td>
<td>Yes  No</td>
</tr>
<tr>
<td>H. Specify on reverse other factors which you think are important in inhibiting participation in Federal subcontracting.</td>
<td></td>
</tr>
</tbody>
</table>

4. What factors, if any, tend to put small business at a disadvantage, compared to other offerors, in obtaining Federal awards or subcontracts? (Use reverse if needed.)

5. If direct or indirect small business participation in Government procurement is to be increased, what changes would you suggest in Federal policy or practice? (Use reverse if needed.)

6. Would you prefer that the Government make more use or less use of each of the following? (If no preference, leave blank.)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>A. Sole source procurement</td>
<td>More Use</td>
<td>Less Use</td>
</tr>
<tr>
<td>B. Fixed-price contracting</td>
<td></td>
<td></td>
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<tr>
<td>C. Cost-type contracting</td>
<td></td>
<td></td>
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<tr>
<td>D. Incentive contracting</td>
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<td></td>
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<tr>
<td>E. Local procurement from a Federal schedule</td>
<td></td>
<td></td>
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<tr>
<td>F. Multiple award schedules</td>
<td></td>
<td></td>
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<tr>
<td>G. Follow-on awards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Option items in awards</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COOPER AND COMPANY
FIGURE 3 — PAGE 6

<table>
<thead>
<tr>
<th>More Use</th>
<th>Less Use</th>
<th>No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Multi-year awards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. Definite quantity awards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K. Basic ordering agreements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L. Commercial (as opposed to Federal) specifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M. System (as opposed to subsystem/equipment) awards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. Small business set-asides</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O. Formally advertised (non-negotiated) awards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P. Arbitrary limitation on number of offers solicited</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q. Prequalification of products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R. Prequalification of offerors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S. Bidders' conferences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T. Commerce Business Daily</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. For each statement below indicate whether, in your opinion, it is true or false. (If no opinion, leave blank).

<table>
<thead>
<tr>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. There are many substantial awards/solicitations not synopsized in the Commerce Business Daily.</td>
<td></td>
</tr>
<tr>
<td>B. By the time a solicitation is synopsized it is usually too late to go after it.</td>
<td></td>
</tr>
<tr>
<td>C. Many solicitations are only nominally competitive.</td>
<td></td>
</tr>
<tr>
<td>D. Many procurements that are &quot;small business set-asides&quot; ought not to be.</td>
<td></td>
</tr>
<tr>
<td>E. Many procurements that ought to be &quot;small business set-asides&quot; are not.</td>
<td></td>
</tr>
<tr>
<td>F. Government requirements are stated, with unnecessary frequency, in ways that preclude small business participation.</td>
<td></td>
</tr>
<tr>
<td>G. Assistance to small businesses, in making their capabilities known to the Government, is adequate.</td>
<td></td>
</tr>
<tr>
<td>H. Pre-award surveys of facilities and financial responsibility are generally fair and adequate.</td>
<td></td>
</tr>
<tr>
<td>I. The Certificate of Competency program is needed by small business</td>
<td></td>
</tr>
</tbody>
</table>
8. What source(s) of information have you principally relied on to obtain timely information about the Federal contracting and subcontracting opportunities of interest to you? If both are applicable, indicate contracting by "C", and subcontracting by "S".

Commerce Business Daily ___ Bidders' mailing lists ___
Personal contacts (employee) ___ Washington area rep. ___
PASS ___ Other (specify) ___

9. What are the principal goods/services you have offered to the Government and/or prime contractors?

(SIC's if known):

10. Are there some categories of Federal solicitations or subcontracting opportunities, within your field of interest and competence, on which it is your policy not to bid, or to bid exclusively, e.g., negotiated contracts, "cost plus" awards, those under $500,000, those from certain agencies, etc.? Yes ___ No ___

If yes, please describe on the reverse the categories you exclude or focus on, and the reasons for doing so.

11. Please provide your best estimates of the following:

A. Number of Federal solicitations obtained by your organization in past 12 months

B. Number of Federal solicitations on which offers prepared by your organization in past 12 months

C. Number of unsolicited offers to Federal Government by your organization in past 12 months

D. Number of Federal awards to your organization in past 12 months

E. Dollar volume of Federal awards to your organization in past 12 months

F. Dollar volume of Federal subcontracts obtained in past 12 months

12. Have you sought to award Federal subcontracts in the past 12 months? Yes ___ No ___

If yes, what dollar volume have you awarded? $

Please provide, on the reverse, the names and addresses of up to three firms that made offers on these subcontracting opportunities (whether successfully or not) and up to three firms that you viewed as potential bidders who failed to make offers. (Our intent is to send them questionnaires similar to this one.)
PART III

Please supply the following information about your organization:

1. Name of organizational unit to which responses apply: 

2. Type of organization:
   - profit-making corporation
   - subsidiary or operating division of profit-making corporation
   - other profit-making (non-corporate) entity
   - non-profit organization (specify type)

3. Years in operation: _________

4. Principal products/services: ____________________________________________

   SIC's if known: ________________________________________________________

5. Total receipts for most recent fiscal year: $ ____________________________

6. Average employment level for most recent fiscal year: ____________________

7. Do you intend to seek Federal awards or subcontracts in the future? Yes __ No __

   If no, why not? _______________________________________________________

8. Would you be interested in obtaining a copy of our project report? Yes __ No __

9. Individual responsible for completing this questionnaire:

   Name ____________________________ Telephone number __________________

Note

Names of responding organizations and individuals are requested solely to make follow-up possible, if this should prove necessary in order to understand or clarify responses. All names will be deleted prior to data compilation.
QUESTIONNAIRE

PARTICIPATION IN FEDERAL PROCUREMENT

This questionnaire should be answered on behalf of your organization by the official responsible for bidding decisions relating to the area of the procurement identified in the next paragraph. If your organization is a subsidiary (or independently operating division) answer only on behalf of the subsidiary or independent division. The questionnaire is in three parts. The first deals with a particular Federal procurement. The second is based on your experience with Government procurements and solicitations in general. The third calls for information about your organization, to help us classify your responses to the first two sections.

PART I

This section concerns a November 1980 requirement by the Department of Finance for a study to determine the impact of excise taxes on the consumption of alcoholic beverages.

Where appropriate, please use check marks (✓) to indicate your answers. If you need to qualify your answer for any reason — for example because your answer applies only to some items in the solicitation — or need more space for explanation, please use the other side of the page, identifying the question by number.

1. Was your organization aware of this requirement? Yes ___ No ___

2. Should the Department of Finance have been aware of your capabilities in the area of the requirement described above? Yes ___ No ___

3. Was your organization invited to submit a proposal on this requirement? Yes ___ No ___

4. Are your capabilities such that you should have been invited to submit a proposal on this requirement? Yes ___ No ___
   If "Yes", and not invited to participate, what is the most likely reason, in your opinion? ____________________________

5. If the Government believed that there were only one or two organizations qualified to meet this requirement (taking account of prior experience, probable cost to the Government, etc.) would it have been appropriate for the Government to
   (a) Invite the participation of only those organizations? Yes ___ No ___
   (b) Invite participation of many other selected organizations, on the grounds that the Government assessment may be wrong? Yes ___ No ___
   (c) Invite anyone to bid? Yes ___ No ___
   (d) Inform potential participants of its prior judgments on qualifications? Yes ___ No ___

COOPER AND COMPANY
One of the procurements we are studying involved

the acquisition of ____________________________________________
under P.O. or contract number __________________________________
dated ____________________________

and we believe this procurement arose as a result of a requisition or request from your organization [(dated ____, number ____
or (whose date and number are unknown to us)]. We would appreciate it if you would, using additional sheets when necessary:

1. State the number and date of the original requisition/request that gave rise to the above procurement

   number: ____________________________
   date: ____________________________

2. Identify here all of the items and quantities appearing on this requisition/request. (A facsimile is acceptable, if available).

   ____________________________________________
   ____________________________________________
   ____________________________________________

3. Explain the policies, procedures or circumstances that established the grouping (inclusion and exclusion) of items on this requisition.

   ____________________________________________
   ____________________________________________
   ____________________________________________

4. Please explain, for each procurement item we initially identified above, the policies, procedures or circumstances that established

   (a) the quantity of the item sought

   ____________________________________________
   ____________________________________________
   ____________________________________________

   (b) The specifications (or source) of the item sought

   ____________________________________________
   ____________________________________________
   ____________________________________________

   (c) The priority (or delivery time) of the item sought

   ____________________________________________
   ____________________________________________
   ____________________________________________

5. Did you use standard Government specifications for the items in this requisition? [ ] Yes [ ] No

   If yes, do you believe that non-standard items were obtainable that were superior, taking account of cost and performance? [ ] Yes [ ] No

COOPER AND COMPANY
6. Do you believe that the interests of the Government would be better served if

(a) More items were procured to Government specifications? Yes __ No __

(b) More items were procured to commercial specifications? Yes __ No __

(c) More procurement was at the equipment or component level, rather than a system or subsystem level? Yes __ No __

(d) More procurement was at a system or subsystem level, rather than the equipment or component level? Yes __ No __

7. Did you have a role in the selection of those who were invited to bid? Yes __ No __

If yes, please describe your role and the basis of your recommendation:
__________________________________________________________
__________________________________________________________

8. Did you have a role in the selection of the successful offeror? Yes __ No __

If yes, please describe your role and the basis of your recommendation:
__________________________________________________________
__________________________________________________________

9. The person completing this questionnaire:

Name ________________________________
Position/Function ________________________________
Telephone number ________________________________
APPENDIX B

SALIENT ASPECTS
OF
SELECTED PROCUREMENT ACTIONS
Case No. 1

This was designated as a "competitive negotiated award," and was made to an extremely large corporation. The award was described as R&D, involving about 60 man-years of support, plus two additional 1-year options, at the same level, to cover "analysis, design and programming, software testing, maintenance and/or preparation of software end items, document preparation, training, briefing support, software installation and on-site software support tasks". It was also described as being for "technical non-personal services in connection with the assembly, installation or maintenance of systems which are of a highly technical or specialized nature". Work was said to be limited to authorized tasks. The small business size standard was 500 employees.

A small business set-aside was recommended by the small business specialist, on the grounds that (a) the sources originally proposed by the originators of the procurement request contained 3 small businesses, out of a total of 7, (b) there were many more small businesses in the same line of work in the procurement operation's own list, and (c) the specialist had identified additional interested and capable small businesses. The contracting officer rejected the recommendation "due to the depth and diversity of experience required to perform the software support effort. The only known firms who have this background are the five large business companies noted...The three small business firms who have held previous...support contracts do not have the requisite experience in...equipment/software." Further, the chief of the technical section involved wrote that "There are not many companies large or small that will be fully qualified to perform this effort. The present contractor is large enough to re-locate their personnel should they lose the award, thus making their personnel unavailable for employment by the winner."

The solicitation, which was synopsized, described the Government's requirements almost entirely in terms of personnel qualifications. All of the organizations (5) deemed qualified were invited to bid, and we counted 45 others who were said to have obtained the solicitation (presumably via the Commerce Business Daily, personal contact, etc.). A bidders' conference was held, attended by the 5 "qualified" firms and 9 others, including some very large ones. It was said that the procurement operation anticipated 3-5 bids. Only one bid was received — from the incumbent contractor, described as "the sole contractor for years." Speculation by government personnel on the reason for only one bid included: "They (the 5 firms) do not like to 'step on each other's turf." Another said: "If a potential bidder knew his way around it would be easy for him to find out that we were happy with the incumbent."

Questioned about the acceptability of a small business consortium, or joint bid, with equivalent range and depth of personnel, procurement officials stated it would not be acceptable to "the engineers".

Case No. 2

A solicitation was issued, under which the agency sought to procure, by formal advertising, its requirements for 29 small, manufactured items which it carried in stock. For each item a "minimum" and "total" quantity was...
specified. An extensive automated mailing list, supplemented by a hand list and individual requests, was used to solicit responses. Bid samples were required, to be reviewed for "workmanship".

In response, 8 bids were received, some from manufacturers and some from dealers, representing both large and small businesses. (A set-aside had been rejected because of prior bidding history on "similar" procurements.) Only one bid was received in which all items were bid, but no award was made to this bidder because, on the one item on which he was low, no sample was submitted. No item was covered by more than 5 bids. Another bidder was rejected on two items to which he had attached a commercial specification. A third had a sample rejected as unacceptable. Eventually, 5 of the 8 bidders received contracts (after inspection of their facilities), the largest being for 8 items. The 4 large bidders all received awards. (Small manufacturers bid on only 9 of the items). Two items were not awarded at all.

One firm was asked for, and submitted, a subcontracting plan.

Case No. 3

This case involved a procurement action for the leasing and maintenance of security systems installed in an agency building, in response to a request for renewal of an existing contract, for a one-year period. The existing contract had apparently been awarded on a sole source basis, for reasons not ascertainable from the file. The contracting officer required that a new contract be issued.

In the actual event a new sole source justification was prepared: "...it would not be cost effective to competitively bid the contract and have to remove [the incumbent contractor's] equipment...and then have to reinstall another company's equipment. [The incumbent] is the only firm which can maintain its own equipment". A small business specialist review concurred in this assessment. Accordingly a letter was sent to the incumbent (only) requesting that he make a fixed-price bid, and provide a cost breakdown in the format required by the approved agency cost forms. The incumbent responded that his accounting system did not permit such information, and provided a price 15% higher than that previously paid by the government, based on "catalog prices." It is clear that price was never negotiated, but was considered "fair and reasonable". The awardee indicated that he would not provide service without a signed contract, which had been issued "subject to the availability of funds", and a funding amendment was issued on the first day of the service year.

Case No. 4

This was classified as a formally advertised procurement for a definite quantity of a single item appearing on an expired schedule (which would have exceeded the maximum order limitation of the schedule in any event). Extensive distribution of the solicitation was accomplished, via automated mailing lists, hand lists, advertising, and so on. However, the solicitation showed that it was actually a small business set-aside (estimated value about
$25,000). 4 bids were received and award made to the lowest.

In conversation about this case it became clear that these procurement officials preferred the "definite quantity" procurement, because experience suggested that the price would be better than on the schedule (if there had been one). In fact, however, the award was at a price 25% higher than on the expired schedule. The price analyst considered the increase reasonable, and recommended award, after an analysis based partly on information about production costs that he had sought from the low bidder. However, careful review of the material clearly indicates that the price analyst misinterpreted the information supplied (which was largely irrelevant to any explanation of the price increase — partly because the base price was that of another manufacturer).

Case No. 5

This was a sole source, classified, contract awarded to one of the largest corporations in the U.S., for less than $50,000, on a cost-plus-fixed-fee basis. No solicitation was issued by the Government, although the award was said to have been synopsized. The award covered computer and programming time. The contract negotiator claimed not to know why it was sole source or classified, but file information revealed that it was to provide the Government with access to cost data required for program management. (The items being produced were classified). There was no information on the circumstances under which the Government was required to pay for such data. It was said that the required information was "available in (the contractor's) data bank only, and it is not feasible nor proprietarily acceptable to (the contractor) to utilize another contractor." The procurement operation in question had awarded 7 sole source contracts to this contractor in the preceding 4 years — worth $150-200 million dollars.

Case No. 6

This procurement action concerned the award of a series of "commercial master support contracts" with an estimated dollar value of $45 million. A solicitation was issued for the provision of "planning, analytical, technical and other required services to [the agency]" on a "quick reaction", "work order" basis. No one work order was to exceed $250,000. Two additional option years were to be included in the contracts. Both "cost plus" and "fixed fee" awards were contemplated.

The file shows an extended and complex dispute about the role of small business, and the possibility of set-aside, in which appeals were eventually taken to the highest [agency] and SBA levels. Originally one of three areas was set aside, and the dispute arose over the other two. Both of these, in our judgment, involved activities in which many small firms have clearly been active (planning, design evaluation, cost-benefit analysis, etc.). However, the agency argued that "...the urgency of many...program requirements and our inability to accurately predict either the timing or specificity of the individual tasks...[make it]...essential for [the agency] to maintain a flexible procurement arrangement...". In these two areas it was decided that 25% of
the master contracts would be to small business, but there was no commitment to any actual task award under these contracts (other than the minimum $2,500 for each contract awardee). The small business specialist would be permitted one day to review each proposed task order.

The solicitation was issued, a pre-proposal conference held, and 101 offers received, 37 of them from small business. From the particular contract file selected it was not possible to determine how many contracts were entered into. It is of interest to note, however, that the interval between issuance of the solicitation (after resolution of the small business dispute) and contract award was 14 months, perhaps due to the use of the apparently controversial "commercial master support contract".

Case No. 7

This procurement was competitively negotiated, and covered requirements for staplers that the agency stocked. The possible use of an advertised procurement was rejected on the basis of past absence of competition in similar procurements. The solicitation, which required samples, covered annual requirements for 4 different items; and provided estimated procurement quantities of each, with about 30% being "guaranteed minimum".

The requirement was synopsized, and 138 sources were solicited (including hand and automated lists). A total of three bidders responded. The one large business respondent bid on 2 of the 4 items, underbidding his sole competitor by about one-third. On the third item the two small businesses competed, and the loser protested that his bid was equal, but the agency decreed that a price of $24.83 with a 2% prompt payment discount was lower than a price of $23.75 with a 1% discount. Whether prompt payment would actually be accomplished was not considered; nor was the reported difficulty of contractors in securing the undiscounted price when payment was not prompt. On the fourth item no bid was received.

Since prices were deemed "reasonable", no actual negotiation took place.

Case No. 8

In this case the agency entered into a blanket purchase agreement (not to exceed $75,000), under an existing Federal Supply Schedule contract, to a particular manufacturer. This represented a continuation of a preceding agreement, for "maintenance and installation support for [a category of agency] equipment, to include parts, supplies, equipment and labor".

What is most interesting about this file are the statements made, by different individuals, to justify the sole source procurement. The argument of the requisitioner, who had specified the source, was: "Prices have been established and negotiated with GSA under contract...and represents the lowest and most favorable price for each item. To seek competition would not be in the best interest of the Government and would only increase the cost to [the agency] since GSA contract...has established the lowest price to the
Government. [A competitor] would have to increase prices in order to stay in business... Another vendor is not likely to always be responsive to our demanding day to day requirements...". On the other hand, the procurement officials argued that the sole source vendor had an "exclusive capability", and, among other things, said that "[the agency] currently has approximately $300,000 invested in unique [contractor] equipment...This sophisticated [type of] equipment requires unique technical support and parts which must be obtained from [the contractor] to maintain equipment specifications...[The contractor] shelf-stocks from (sic) a ready source of supply a complete and comprehensive selection of unique components to support [agency] equipment...".

Case No. 9

This procurement dealt with the acquisition of "concept exploration studies for a (hardware) system", and was described as competitively negotiated. Formal advertising was ruled out, because "it is impossible to describe in precise detail, or by definite drawings and specifications, the nature of the work to be done." The work was categorized as R&D, and was not synopsized, on grounds of security. Outside (private) organizations were used to help evaluate proposals; and bidders were warned that they would have to sign agreements, in the event of contract, permitting access of certain private organizations to data which "the Contractor may consider proprietary."

All of those recorded as having been sent the solicitation — 14 organizations — were large hardware producers; although there was nothing in the file to indicate why broad "concept exploration studies" should have been so restricted. Procurement officials stated that the list came from "the project personnel familiar with past work, with a few names added here", and contained "all known firms who have the capability". The small business size standard was 500 employees.

Parallel awards were made to 3 of 6 bidders, on a cost-plus-fee basis, at a dollar level that was stipulated in the solicitation, in the range of $7-9 million each. Procurement officials expressed the view that contractors would, in addition, "spend their own money" in ways "not solely related to this contract" — one of the implications being that they wanted subsequent production contracts. Since, however, the work was to be fully funded by the government, the basis for any subsequent claim of "proprietary" data is obscure.

The basis of award was described as "technical superiority", by criteria that were "secret".

Case No. 10

This was a formally advertised annual "requirements" solicitation, involving 59 line items, for certain small hardware, with an estimated value of $500,000. Four of these line items were small business set-asides, it being judged that there were not enough sources for set-asides on the remainder. About half of the items had specifications written in terms of one of two specific brand names "or equal". Except for the named brands,
samples were required.

Of the 149 firms solicited, 7 manufacturers submitted bids — 5 of whom were small business. None submitted on all line items. Of the 7 bidders, 6 received awards, ranging from $3,500 to $300,000. About a dozen line items had no awards associated with them, and about 70% of the total dollars went to the two manufacturers named in the solicitation. In the actual event, two of the four items set aside for small business were not awarded, even though four bids were received on each, because it was later determined that the agency had a sufficient stock.

Case No. 11

From the file it appears that this procurement action represents a 3-month extension of an existing contract for acquisition of library services, plus an option of an additional 3 months, at a total cost of about $200,000. The contract in question had been in force for more than 2 years. There was no solicitation and no synopsis, and this (large business) action was concurred in by the small business reviewer.

In justifying this sole source award it was said that "The library has operated using an identical competitively negotiated contract with [the named contractor] since [two years before]. The library has combined the requirements of this contract with several other requirements and has a current procurement action (Number...) which is scheduled to be awarded by [6 months later]. This procurement action is necessary in order to continue...services until the new...contract can be competitively negotiated...The recommended contractor has an investment in computer programs and [agency] records which would have to be duplicated at Government expense if another source were used. This procurement must be placed by [three months later]...to avoid a lapse in...services. The current contractor is the only source which can meet this schedule without seriously affecting the services...The computer programs the contractor has developed to support the contract at his own expense would take at least a month of startup if someone else had to develop them. Time/cost factors make it expedient to use this contractor for the interim period."

Case No. 12

This procurement was a negotiated, definite quantity award representing the consolidation of requisitions for some items appearing on an expired schedule. However the need was classified as urgent, and the requirement was not synopsized and not set-aside because of "public exigency". It is clear that many names on the automated list, and even on the hand list, were not solicited, since the total number was recorded as 14. The file contains no indication of the reasons for the limited number, but it appears that "automation" takes longer! The underlying solicitation involved two groups of items for award. 5 bidders responded on one group, 2 of whom also bid on the other.

Despite these circumstances what is most noteworthy is that the principal award (on one group) involved a price 24% lower than the (expired)
schedule awarded 18 inflationary months earlier. That the bid price was "realistic" was suggested by the fact that the next-to-lowest bidder was 35 cents higher on a unit priced in the vicinity of $250.

Case No. 13

The Statement of Work covered "the requirements for on-the-job training in field engineering and equipment maintenance and repair for specified equipments and systems under the cognizance of...". The contractor was to be prepared "to dispatch his employees to their assigned (locations) on award of contract". Award was to be made to the lowest-priced technically acceptable offer on a task by task basis. The solicitation was synopsized in the Commerce Business Daily. The small business size standard was 750 employees; but a set-aside was deemed inappropriate because a partial set-aside for similar requirements "did not result in receipt of an acceptable offer."

The grounds for "competitive negotiation" rather than "formal advertising" were described as being that the award was "for technical, non-personal services in connection with the operation, maintenance, repair and training of personnel in equipment of a highly technical and specialized nature...Due to the fact that these equipments are available in large quantities, and have been available for some time, several companies other than the manufacturer have had the opportunity to become technically qualified to repair and service these equipments. Award will be made on the basis of availability and technical competence, price and other considerations. Accordingly, the use of negotiation and not formal advertising is justified."

The total solicitation was for under 10 man-years of effort per year, plus 3 option years. Contracts were to be "labor-hour" type, on the basis of "precedent established by contracting officer", because "some small companies in this type of work are not set up to handle cost-plus". A total of 6 offerors responded, out of about 40 known solicitation recipients, but not on all tasks. 4 awards were made on specified tasks — 2 large and 2 small firms.

The "highly technical and specialized nature" of the services required may be judged, to some degree, from the fact that, in fiscal year 1981, their cost to the government (including contractor overhead and fee) was less than $100 per man per day under the selected contract.

Case No. 14

This case deals with a competitively negotiated procurement for award of a study contract, valued at about $350,000, to assess the impact of [a new technology] on [a major U.S. industry]. The solicitation was synopsized, a hand list was developed, etc., and the file indicates concern about obtaining response from appropriate bidders. The solicitation indicated that the agency sought expertise in the named industry, which might not normally be interested in Government solicitations. In the event, copies of the solicitation were issued to 26 organizations on the hand list, and to an additional 174 on request. 11 firms responded, of whom 3 were deemed to be in the competitive range. One minority firm not in this range complained of unfair treatment, but the agency insisted that its assessment was fair and adequate.

COOPER AND COMPANY
Of the 3 firms in the competitive range, 2 were industry firms while the third was a firm essentially specializing in consulting work in the industry. The third firm rated lowest technically, but was also lowest cost. The requisitioner recommended award to the firm with the highest technical rating, while procurement officials proposed award to the lowest bidder. (The latter argued that additional technical qualifications were not worth "$700 per point" — a statement whose meaning is, at best, obscure since the quality scale was obviously arbitrary, and could as easily have yielded $70 or $7,000 "per point"). In the final analysis, the whole cost versus quality question was inappropriately formulated, since the award was to be cost plus, there was uncertainty about what costs (for example, overhead rate) would actually be, and yet the comparison was in terms of cost-estimates in proposals.

Interestingly, while the view of the procurement officials prevailed, the low bidder refused, in negotiation, to accept any ceiling on his overhead rate — financial negotiations were not conducted with the others on the grounds that "the Government has adequate protection" regarding overhead — so that the question of comparative cost became moot, and with it a meaningful ranking of the three contenders.

While the Contracting Officer had ruled that there was no conflict of interest, the agency counsel refused to accept this ruling, and asserted that there was potential conflict of interest for all 3 firms in the competitive range — perhaps somewhat less for the low bidder. In accordance with regulations, notice of the proposed award was published in the Federal Register.

The lapse of time between the official request for procurement and actual award was 21 months.

Case No. 15

This procurement action represented a competitively negotiated acquisition of definite quantities in a category of manufactured items, carried in stock by the agency. The estimated value of the award was less than $100,000, representing small quantities of 8 different items, in the price range of $75 to $250 each.

A total of 13 firms were solicited, consisting of 10 from a hand list, plus 3 additional requests. No automated bidders' mailing list was employed.

Only one bidder responded (as anticipated) and was awarded a contract for all items. Of the 8 items, 4 were sold only to the Government, at least by the successful offeror; and for one of them there was no record of prior sale (government or commercial) by the offeror.

Case No. 16

This procurement covered the acquisition, under a Federal Supply Schedule, of magnetic tapes. Despite the schedule, the users had previously requested a Blanket Purchase Agreement; and this was an "emergency" request to meet the agency's needs until the contract was awarded.
Case No. 17

This procurement action dealt with the exercise of a fourth-year Governmental option under a Fiscal Year 1978 contract, the basic contract being for one year only. The original Statement of Work stated that many items of (Departmental) test equipment procured by the (Department) are available for lease, and that a pilot program was being introduced to "validate the feasibility of a leasing concept in selected (Departmental) environments," and to evaluate any other benefits and problems peculiar to Departmental leasing of such equipment. The procurement was to "provide (certain) test equipment on a lease basis", including calibration and maintenance services and data, and that all equipment items, etc., were to be in a single award. The justification for the absence of formal advertising stated that the equipment is "technical and complex", and, as a pilot program, "a certain amount of flexibility is required in establishing terms and conditions and in allowing for substitutions for specified equipments....It will be necessary to hold detailed discussions with offerors to ensure that the Government's objectives are fully understood...It is impossible to draft, for a solicitation of bids, adequate specifications or any other adequately detailed description of the equipment."

The original recommendation was for small business set-aside, size standard 500 employees. This recommendation was withdrawn simultaneously with a change in the size standard to $2 million per annum, since there was "no reasonable expectation of receiving a sufficient number of bids from SB/LS sources to assure award at reasonable prices".

The solicitation was synopsized, and the project office also recommended sources. Three bids were received, and a firm fixed price award made. The lowest offeror did not offer all equipment, and all bidders proposed substitutes, for some requirements, but talks were not held with offerors because the winner was "so superior". No information is available, after three years, on whether the pilot program is a success, or on when the "pilot" program will end.

Case No. 18

This was a formally advertised "requirements" procurement action for items which the agency normally carried in stock. It provided estimates of required quantities of 28 similar line items, as well as a 25% minimum guarantee on each. Bid samples were required on most items. Small business set-asides were invoked for 20 of the items.

A large number of firms were solicited, including those on an automated bidders mailing list and a hand list. A total of 12 offerors responded, including manufacturers and dealers — some of them small — of whom 6 obtained awards. None had made offers on all items, and 6 line items were not awarded. Some bids were rejected because samples failed (for example, "wrong size", "handle wrong color", "rust"). Some were rejected because of the absence of a sample. Some were rejected because of "excessive price", although there was a low bidder. Some items were determined to be in long supply and therefore not awarded — a fact which is difficult to explain in view of the less than
90 days elapsing between date of solicitation and date of award.

The agency determined that competitive negotiation would be used for acquisition of those unawarded line items it still wished to award.

One firm complained about plant inspection procedures, although it was approved. Another showed proof, for one of the unawarded items, that it had shipped samples, but the government claimed no record of receipt.

Case No. 19

Under this procurement action the agency made a sole source award for "classification and indexing support", in an amount that was less than $100,000.

A task force had concluded that such support was required, but the technical expertise was not available in-house. In justifying the sole source award, the file states that "The Project Manager...who will be supported by this contract spent almost a year searching for an expert in [...]. Only two were found in the U.S., and [a named individual] was able to spend more time on the project, so he was chosen. He now has considerable experience in [agency] problems and is uniquely qualified...No one...in the Federal Government is engaged in research in...". It appears, however, that the experience in question was gained as a subcontractor to another firm. Further, the award under discussion was not to the allegedly unique individual, but to a (small business) firm which he had formed. Nor is there any evidence in the file that the search of "almost a year" included any effort to advertise.

Although not indicated in the file, at some time the agency presumably announced its intention to award a sole source contract, because the file shows a request from another firm for "the proposed statement of work" and claiming expertise in the area. The firm then protested the award, claiming partial duplication of a proposal it had submitted the preceding year.

Following the protest, memoranda were prepared from which it is clear that originally a three-year sole source award had been sought by the project manager; that procurement personnel had sought to make a competitive award; that the other acknowledged "expert" was and had been a consultant to the protesting firm, but, in contrast with earlier statements, was now claimed to be ineligible because of conflict of interest (having been a "bidder" — not an awardee — on a related project). The memoranda reveal a compromise in which, because of the alleged "urgency" of the requirement, it was too late to have a competitive contract for that year: hence a sole source for one year only. Eventually, the principal response to the protest was in terms of the urgency of the procurement.

It may be noted, also, that in responding to the protest, the agency cited the limited availability of the alternative expert consultant. However, the number of days of availability was in fact greater than that to be provided by the expert in the sole source award.
Case No. 20

This was a formally advertised "requirements" type contract, with a value of about $100,000, involving purchases for stock of certain simple equipments. 234 firms were solicited via an automated list, the Commerce Business Daily, and so on; with the solicitation covering at least 28 different items. The present contract involved only 3 of these items, for which there were precisely 2 bidders. (17 items were not awarded at all, although there were 12 bidders in all — one a large manufacturer, the others small manufacturers and dealers).

The file in this instance happens to show the basis of award to the successful offeror on the three items — apart from the fact that he was low bidder. Prices bid were compared to prices previously paid, the prices of "comparable" commercial items, the increase in the producer price index, the discounts offered, whether the item was or was not "off the shelf", etc. In one of the three items the price analyst suggested that special Federal specifications (such as a special washer) were costly to the Government and perhaps ought to be reconsidered. In a second case the item's special Federal requirements were especially costly because the total volume was low. In any event, one thing the case illustrates is the fact that "formal advertising" does not mean the Government is willing to accept the verdict of the market-place as to "reasonable" prices.

Case No. 21

This procurement covered an item which cannot be described substantively without Departmental identification. The requirement, originating within the Department, was for a study to be performed by a specific small business contractor, on a sole source basis, for less than $50 thousand. The justification stated that the sole source was appropriate because the work was "similar" to work that source had performed 2 years earlier, and that any other source "would require twice the manpower and at least twice as long" to conduct the effort. However the record states that "no other firm was considered for the proposed acquisition", so the rationale for the manpower and time estimates is obscure. There is no record of any unsolicited proposal. Further, the two contractually specified tasks cover (1) "empirical model development", based on specified Departmental data, and (2) "theoretical model research" based on literature review — again difficult to square with sole source. The file data suggest that the procurement was not synopsized on the grounds that it was for "exploratory development." No other sole source award had been made to this firm in the preceding 36 months by this procurement operation.

Case No. 22

This procurement covered the rental of copying equipment, under the terms of a Federal Supply Schedule contract.

The file shows nothing noteworthy except that (a) a purchase order had an obvious arithmetic error, with no evidence that it had been caught, and (b) the "justification" for the renewal of rental was simply irrelevant.
Case No. 23

This procurement action involved the attempted acquisition, by formal advertising, of requirements for 16 items, comprising various sizes of a particular hardware item that the agency carried in stock. Specifications and drawings were included in the solicitation, although it appeared that these conformed to the items of a particular manufacturer, and that the two larger sizes were purchased only by the agency.

An extensive mailing list was prepared, based partly on the agency's automated list preparation procedures, partly on a hand list from prior related procurements, partly on use of Thomas' Register, and partly on requests arising from advertising.

Three firms apparently made bids, one of which was deemed "late". The lower bidder of the two remaining obtained a contract covering all of the 11 items that also had commercial purchasers, and this bidder was the one whose specifications appeared to have been used in the solicitation. No bids were received for the remaining 5 line items.

A "pre-solicitation survey" had indicated that a number of bids might be obtained if minimum quantities were larger, and/or there were a definite quantity purchase.

Procurement officials indicated that, for future procurements, efforts might be made to identify other commercial items or change the specifications.

Case No. 24

This case involves a solicitation for competitive negotiation of award of definite quantities of 12 equipment subsystems.

The available file does not indicate whether the solicitation was synopsized in the Commerce Business Daily; or how a mailing list was developed; or whether a small business set-aside was considered. It is recorded, however, that solicitations were mailed to 21 firms, of whom 7 submitted technical and price proposals. No firm bid on all subsystems — the greatest number was 8 — while one bid on only one. On at least one subsystem only one bid was received.

The competitive range included all 7 offerors as technically acceptable; and they were then asked to respond to a list of questions to clarify pricing. Only 5 did so. Allegedly the awards were then made on the basis of "life cycle cost" to three of the offerors. However, it is not possible to determine from the file how the problem of "all or none offers" was treated — in which, for example, a bid was made on two or three subsystems as a "package". The process used was such that, in fact, there was a failure to award on at least one subsystem, which had been bid only as part of an all-or-none offer. In the instant contract (two of the subsystems), firm fixed price was used, since, it was said, the items were "standard commercial".
Case No. 25

This procurement was "to conduct a detailed review and analysis of the performance of two contractors who, working under (Departmental) contracts, have experienced production difficulties resulting in delays in (delivery) as well as alleged increases in cost". The small business size standard was set at $7.5 million per annum.

The procurement was not synopsized in the Commerce Business Daily, on the grounds of its "urgency". For the same reason there was no small business review until after award, but such review indicated that it should have been a set-aside under procurement regulations — a position rejected by the Contracting Officer.

Classified in our listing as a "design competition", the procurement operation issued an invitation to bid to precisely two firms — one large, one small — identified by telephone call to a parallel procurement operation said to be "more familiar with the qualified firms having the specified qualifications". Of these two firms, the small business responded on the following day that they would not bid. A "cost plus" award of about $250,000 was subsequently made to the large firm.

Since the substantive area of the procurement is one with which the present investigator happens to have some familiarity, it may be appropriate to point out that, in our judgment, dozens of organizations were fully qualified to perform the work required.

Case No. 26

Under this procurement action, the government sought to acquire, by formal advertising, definite quantities of 6 line items that the agency stocked — all being of the same general class. A small business set-aside was said to be precluded by "insufficient competition": on a previous, similar, procurement 4 bids were received, 3 of them from small businesses (dealers) who would apparently have supplied items manufactured by large business. The procurement represented a consolidated stock purchase of items requisitioned over about one year. Bid samples were not required.

An extensive mailing list was utilized for distribution of the solicitation, based on a hand list, automated mailing lists, and so on. The original bid closing date was extended (because of an administrative "freeze"); and, some two months after the (extended) closing date, bidders were asked to extend for an additional month.

A total of 7 bidders responded, only one of them on all 6 items. He obtained award on 3 of them. One large manufacturer who was low bidder on the one item on which he bid, had declined to extend his bid for the final month, and had offered a minutely smaller quantity than that called for in the solicitation — although this may have been inadvertent. Two items were awarded to a manufacturer (who bid on only those items), even though he had not submitted an extension: this was deemed a minor irregularity. The last item was awarded to a small business dealer, who was offering an item made by
the large manufacturer who had refused to extend his bid. Interestingly, that manufacturer — and two other bidders who were contacted by procurement officials — said they "could not supply" the item in question, and that the dealer "carried his own inventory" of the manufacturer's products.

Case No. 27

By this procurement action, the agency accepted the first phase of an apparently unsolicited proposal, and entered into a cooperative agreement for "an exploratory study of a proposed new process for conversion of...to..."). Under this agreement, the recipient of the award, an R&D organization, undertook to share the costs with the Government.

It appears from the file that the proposer sought and obtained a waiver of the Government's patent rights, in exchange for 20% of gross royalties — up to a maximum of 250% of the Government's investment. It also appears that at least some of the proposer's "own" funding came from another corporation, in exchange for the right to license the new technology when developed.

Case No. 28

The procurement action in question may be said to have begun with an attempt by the procuring agency to acquire, by formal advertising, its requirements for stock of 21 relatively routine items of hardware. However, 2 items were partial small business set-asides. In this effort, while 247 suppliers were solicited, and 13 bidders responded, at least 6 items were not awarded at all — including the two on which there had been set-asides. On these 6 items bids were rejected for a variety of reasons — absence of samples, poor workmanship, did not conform to specifications; and no responsive bids were made to the set-asides.

This is the background for the present case, under which the agency sought, by competitive negotiation and without set-aside, to procure its requirements for the 6 items not previously awarded. The new solicitation provided estimated quantities required, with a 25% minimum guarantee. It appears that only a hand list was used for distribution of this solicitation, consisting of 16 firms, 6 of whom chose to bid — 4 large manufacturers and 2 small dealers. However, no one chose to bid on all 6 items, the number of bids by item ranging from 2 to 4. Two of the large manufacturers obtained awards for 5 of the items, for under $150,000. The low bidder on the sixth item (who did not bid on anything else) was a small dealer, but no award was made, allegedly because of "decreasing demand" for the item. As it happens, this small dealer was referred for, and obtained, a Certificate of Competency. However, procurement officials made contact with the large, non-bidding, manufacturer of the items to be supplied by the small dealer, and were informed by its sales manager that there was no "agreement" to supply the dealer and that "government sales should be directed" to the manufacturer.
Case No. 29

This was an award, made without any competition, of the order of $10 million, to a very large firm "selected for award of the subject contract on the basis of experience and technical capability, as well as ability to meet the Government's delivery requirement... (The named corporation) designed, developed and tested this equipment (earlier version) under government contracts (for departments X and Y), and is developing (the later version) under contract number... (The corporation) has the necessary qualified personnel and facilities for performing the work in an expeditious manner able to meet the Government's stated delivery requirements". Although the file states that the "subject contract is for the first production of the (later version)" the justification for the absence of competition goes on: "Furthermore, only (the named corporation) can conduct this definition study [sic] effectively with the required depth of understanding and at the lowest cost to the Government. Another source would cause substantial, intolerable delays to even begin to understand the problem from a systems viewpoint and would considerably increase the total costs to be incurred by the Government." Further, despite design and development under Government contract "technical data" was deemed "proprietary", and "purchase of these rights would be expensive, and is deemed futile in view of the fact that no future requirements are foreseen" — but note the earlier assertion that the contract is "the first" production.

Some other points may be noted. First, despite the urgency claimed in partial justification of the absence of competition, the contract was not awarded (by letter) until 4 months after the time at which it was said it "must" be awarded, and an additional 6 months passed before it was "definitized" in part. Second, nothing in the file suggested that the allegation of higher cost via another producer was based on any evidence. Third, the contract was firm fixed price, despite the unique nature of the procurement; yet prices of spare parts were left open. Fourth, at least 7 other (large) manufacturers were identified who were thought to have the required capability — except, presumably, for the "urgency" of the procurement, the allegations of higher cost, and the claim of proprietary data. No small firm — size standard 750 employees — was identified as capable (apparently without search), but the use of the subcontracting clause was recommended and accepted.

This award was said to be "related to" three prior sole source awards from this procurement office (sub-agency) to the same contractor in the preceding 36 months.

Case No. 30

This procurement involved the acquisition of 10 typewriters under a Federal Supply Schedule.

The acquisition appears routine and unremarkable, except for two features. First, the justification for the requirement was a report, in the file, that typewriters had been stolen; but the requisition was for 10, when only 2 were covered by the report. Secondly, the requisition specified a particular brand, with "special features" — which, according to a note in the file, required special justification under procurement regulations; but the file did not show that such justification was ever provided.
Case No. 31

This case can best be described as a series of procurements, involving definite quantity awards of 5 small items of hardware, in larger quantities than permitted by the maximum order limitation of the corresponding supply schedule. The effort began with small business set-asides on all items, but it appears that this produced "inadequate competition" — details unavailable from the file — and the solicitation was withdrawn. Thereafter, a formally advertised (unrestricted) solicitation was used, which generated responses from 6 bidders — all of them small! — and resulted in awards on 3 of the 5 items. Finally, a competitively negotiated solicitation was issued for the remaining two items, resulting in two additional awardees, one of whom had bid late on the preceding solicitation while the other (a large business) had not previously bid — although, on both items, he was the contractor on the current schedule. As in a number of other instances we happened to become aware of, prices on these two items — the procurement that had been selected by us — were well below schedule prices: 21% and 16%, respectively.

It is of interest to note that both awardees bid on both negotiated items. The large business awardee was not the low bidder on either item; but because, on one item, he was not more than 50% higher than his "foreign", "small business", competitor — actually a small importer of Japanese products — he was awarded that item. On the other item the price differential was more than 50%. The large business paid a commission on this sale to a Washington representative.

It was also observed that although the file states that "all known sources were solicited" on the formally advertised procurement, the hand list was different from that used in the negotiated procurement, and neither list contained either of the successful bidders on the negotiated procurement.

Finally, a variety of disqualifications were observed. In one case a bidder was deemed not qualified under the Walsh-Healey Act. Another was deemed to have "qualified" their bid by writing in a quantity different from that sought — almost certainly inadvertently since the bidder was large. Similarly, a bidder "qualified" his bid by stating that he would meet certain requirements by using specified "part numbers".

Case No. 32

In this procurement action, the government sought to award contracts for "support services" in the areas of systems planning/analysis, economic surveys and assessments, and program/technical analysis, respectively. These services were to be provided, at least nominally, on a task order basis, and procurement by negotiation was considered "necessary because the nature of the requirement described herein cannot be set in a definitive specification..." The initial contract period was to be for 2 years, with options for 2 additional years; although the initial period turned out to be only one year. The cost was estimated at nearly 4 million. The action was to "competitively select new contractors to provide the support presently obtained under contracts .....". Two of three "areas" were determined to be appropriate for small business set-aside.
The procurement was synopsized, and 20 offerors submitted bids. A committee scored each proposal from a technical standpoint, and the three or four high scorers in each area were considered technically acceptable. It may be of interest, illustratively, to consider the first area of activity, in which 12 offers were obtained, and technical scores ranged from a low of 35 to a high of 59. The top four offers were 59, 55, 51, 48, with the first three being in the competitive zone, and the last not. However, when the time for decision came, the top three were considered "technically equivalent" since there was "insufficient variance in their scores (10% or less)". [One wonders, then, about the significance of the (3%) difference between 51 and 48]. Since the third-ranking firm (51) had the lowest cost, the result was an award to that firm — which just happened to be the incumbent. Identifying the three top firms by technical score the summary technical evaluation reads as follows:

"The technical panel found 59, 55, and 51 to be in the range of technical acceptability. 51, the incumbent, was found to have an 'excellent understanding of how to provide the needed support'. The panel also noted that its proposal contained a 'well-developed and detailed Comprehensive Plan'. The panel found 55 'a little weak in terms of real development experience and particularly weak in the areas of...technologies. Although 59 received the highest technical score, this ranking was, to a large degree, based on the use of [Firm X] as a subcontractor... Members of the review panel anticipate the probability of an Organizational Conflict of Interest because of Firm X's contracts..." The last point was not, apparently, verified.

Obviously, either the summary or the scores — or both — were indefensible.

Case No. 33

This multi-year award was the result of a competitive negotiation, which was justified in part because "the specifications...are not sufficiently detailed nor adequate to describe the requirements of this proposed acquisition... Use of a 2-step formally advertised procedure is not feasible since a firm fixed price type of contract may not be used in this award." The initial contract amount was about $3 million, actually on a fixed price basis, with additional orders yet to be established.

The solicitation was synopsized, and an extensive "hand list" utilized to develop a mailing list. Originally, a small business set-aside was recommended by the small business specialist, on the grounds that the agency's "bidders' mailing list" relevant to this procurement contained a sufficient number of small firms "to presume that a sufficient number of bids from small business will be received to assure award at reasonable prices". The size standard was established at 750 employees. The file did not contain any evidence of how the change was initiated, but the recommendation was withdrawn after a conference between initiating (technical) personnel and the small business specialist, on the grounds that "bidders' list number... is inappropriate for this procurement... and efforts to develop sufficient (small business) sources... have resulted in only two small firms who indicated interest and possible capability...".

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The solicitation, which indicated the use of a specific consulting firm (chosen by an unspecified selection process) to help evaluate any competing proposals received, called for the provision of a hardware system "which is based on modifications to existing operational systems", and award was to be "made to the lowest-priced acceptable offer from a responsible offeror". However, the "technical evaluation" was to be based on more than 25 different items, 10 of which dealt with the proposed hardware's capability, 4 with "understanding the problem", 6 with the "management plan", and 5 with "corporate qualifications". All units were to be awarded to one offeror.

In the actual event, out of about 60 firms apparently solicited, 3 offers were received from large firms (none from small firms). "Eventually" all offers were deemed "acceptable", and award made "to the lowest bidder".

Case No. 34

Under this formally advertised procurement, with an estimated value in excess of $4 million, the agency aimed to make awards on a requirements basis for each of five items in a particular category of hardware. Each unit had a value of a couple of hundred dollars. Bid samples were required and were to be tested. On some items awards were to be made "to initially low acceptable offer"; on others, "to the low acceptable offer evaluated in accordance with [stated] life cycle cost criteria".

Because of prior bidding history, a decision was made against use of a small business set aside. In the preceding year bids were received from 8 large and 2 small businesses, and "bid samples from small businesses failed objective tests".

The file discloses that "all known manufacturers of [the items to be procured] will be mailed the solicitation. In the last 10 years, 6 of the industry's major manufacturers have been bidders". These manufacturers also serve the non-government market, although products acceptable in the latter market may not survive government testing. In addition to the hand list, an automated mailing list of 131 names was employed, as well as responses to requests.

A total of 8 bidders responded — 7 from the hand list. However, on one of the 5 items no bid was received, even from the prior awardee. On a second item, only two bids were received — the prior awardee did not bid — and one of these was technically disqualified. On two other items the prior awardee was the only bidder, and was successful. On the fifth and final item, there were 8 bids, of which 6 — including the previous awardee — failed the performance test. Under this solicitation awards were made to two manufacturers, each of whom obtained EEO approval, and satisfactory reports on plant facilities and financial responsibility. However, one was required to supplement its subcontracting program plan.

Case No. 35

This was a sole source award, involving about $50,000 to a commercial organization, for the conduct of a consumer education campaign.

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The procurement was not synopsized because it "is of such unusual or compelling emergency that offers cannot be received more than 15 calendar days after issuance of the solicitation or the synopsis, whichever is later".

Although the available file is sparse, and the circumstances cannot be described in any detail without violation of confidentiality, two points may be noted. First, the award was in the form of a grant — which, in the circumstances, appeared both unusual and inappropriate, and was certainly not justified in the available materials. Secondly, the file repeatedly referred to the award as involving "cost sharing". However, review indicates that, in the normal sense, this did not occur. Instead, the Government was being called upon to pay the entire incremental cost — as estimated by the grantees — of the activities desired by the Government; all of the costs to be incurred by the grantees would have been incurred by him, for his own purposes, with or without Government grant.

Case No. 36

The solicitation issued under this case dealt with the acquisition of the agency's requirements for 15 line items of a particular hardware category, each unit of which was worth a few dollars. Some related items had been procured via formal advertising, but, because of an expected absence of competition, the items in the present case were to be obtained via competitive negotiation. The possibility of a small business set-aside was discarded because a set-aside in the preceding year, on 5 of the items, yielded 2 bids on each of 2 items, 1 bid on another item, and 0 bids on the remaining 2 items. In the instant case the minimum quantity was raised to an apparently unusual 50% of the estimated requirements, in an effort to obtain more competition. Samples were required for these standard items.

170 copies of the solicitation were mailed, to those on a hand list, automated mailing list, and so on; and 10 bidders eventually responded — 8 of them small businesses — through a series of negotiations extending for 4 months after the original closing date, and involving firms which had not initially bid. All awards were to small business. However, it is noteworthy that, even via the agency's iterative procedure, the maximum number of bids eventually obtained was not more than 4 for any line item, applying to only 2 of the 15 items, while no bid was obtainable on one of the items. The agency failed to make an award for 3 of the items.

It is noteworthy that one small business dealer who submitted the low bid on 4 of the items on the initial round, failed to obtain any award, presumably because procurement officials thought the prices too high. Some four months later awards for these items were made to two small manufacturers who had not responded to the initial solicitation.

Case No. 37

This case was selected as an example of a very old contract on which there was a Fiscal Year 1981 procurement action. Much of the background is obscure and was not available to us. So far as we can reconstruct it, the circumstances are as follows.
Early in 1971 a request was made for "urgent" procurement of two different (but related) equipment systems, including "repair parts" and (a massive amount of) "technical data". It was officially determined, in accordance with procurement regulations, that "use of a negotiated contract, without formal advertising, is justified because the public exigency will not permit the delay incident to formal advertising". The file indicates that a small business set-aside was recommended, and the recommendation accepted — apparently because the anticipated bidders were small business. The solicitation documents were "unavailable", and the record seems to indicate that "urgency" was used as a reason for non-utilization of the Commerce Business Daily. The record suggests the issuance of the solicitation to 8 firms, plus one United States Senator. The value of the procurement had been internally estimated by the Government at about $500,000. Proposals were apparently submitted in the late spring of 1971, but the record does not indicate how many.

An award was made to the holder of the contract in the present case (contractor A), which was apparently protested by another contractor, B. (A and B were described as the only real producers). The circumstances of this protest could not be established, but the file indicates that the "public exigency" permitted a delay in contracting with A: a contract was signed by the Government in late summer of 1972 — and by the contractor two months later. The amount of the contract was in the neighborhood of $800,000 (fixed price).

We were told by procurement personnel — although it was not in our file information (which related to a particular contract) — that firm B won an award a year later for similar equipment. The firm defaulted, being two years late in its first delivery of items at "twice the price". Later, a "recontract" was entered into with firm B, with some indication of political intervention in the procurement process. According to procurement personnel "this type of equipment was competed at least 10 times" after the initial award, and it was implied that later awards were made either to A or B, but no other. Both are, at this time, described as "good performers".

On the other hand, the relation, if any, between the alleged 10 or more "competitions" and the selected contract with firm A is obscure. The amount of this contract is now (Fiscal Year 1981) about $10 million, via many dozens of amendments to the 1972 contract. Further, the original contract called for a certain type of data to be provided on an NSP basis, whereas the 1981 action which triggered selection of the case was for a few thousand dollars to provide apparently similar data.

Case No. 38

This procurement involved an R&D project, in the area of the social sciences, valued at about $200,000, and set-aside for small business — size standard $2 million. The solicitation was synopsized. Six proposals were received, 2 of which were deemed to be in the competitive range, and were invited for oral discussion. Apparently as a result, the technical ranking of the two firms was reversed. The file does not disclose how the apparently careful, detailed, quantitative, technical evaluations of the written proposals — which supposedly included all relevant criteria — could properly have been
overturned, since the available material justifies the selection by saying merely that: "[The winner] has demonstrated the superiority of its analytic capability and understanding of the problem, and has the most qualified corporate and project team capabilities when compared to [the loser]. The additional cost is well worth [the winner's] technical capability" (sic). Since all of the factors mentioned here were part of the initial evaluation, some important information is perhaps missing from the file.

Case No. 39

In this case the agency sought to meet its annual requirements for 3 line items of small hardware — total estimated value about $50,000 — via competitive negotiation. The items in question were originally part of a formally advertised procurement, on which the bid prices were apparently judged to be excessive by procurement officials. In the instant case, minimum quantities were set at 25% of the estimated total quantities.

The file does not show that any mailing list, other than the hand list used for the advertised procurement, was used for distribution of the solicitation documents in the present instance. Further, 5 bidders responded — all from this list — consisting of one large manufacturer, one small manufacturer and 3 small dealers. On the first item, 2 bids were received; on the second, 4; and on the third, 2. After negotiation, awards were made to the two manufacturers.

It is noteworthy that, on the third item, the successful bidder was low by about 40%. Notwithstanding this differential — after an initial attempt at procurement via formal advertising — procurement officials sought to negotiate a still lower price with the low bidder. Apparently, more than three years of obvious, "double-digit" inflation, since the bidder's prior offer, were not sufficient to satisfy officials that an increase in the bid price of some 50% was "justified".

Case No. 40

This was a 2-year study contract, valued at about $300,000, on a cost plus basis. The requirement was synopsized and set aside for small business; and 8 firms submitted proposals in response — 4 of them deemed to be in the competitive range. After "best and final" offers, the selection decision was stated as follows: "According to the technical panel's review the lowest cost contractor lacks the experience necessary to perform the work, and should be eliminated. Therefore it is recommended that award be given to the highest responsible contractor with the lowest cost. Further, the technical panel stated that the technical superiority of [the winner] is well worth the dollar difference".

The most interesting aspect of the information available from this file is not, however, in its rationalizations, but in its small business aspects. A memorandum to procurement officials from the small business specialist states in part: "In our meeting of...between...it was agreed that [the instant procurement] would be set aside for the 8(a) program if two prior

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in-house PR's would be released for unrestricted procurement. These were released unrestricted and I recommended five 8(a) firms. There is then a memorandum to the small business specialist from the program chief which states: "I had telephone conversations with key staff members of each of these [8(a)] firms as a preliminary screening step. During this phase, 3 decided that they were not interested in being considered for this award. At this point I invited [the remaining two] for detailed interviews and discussions with our program people. After these meetings it was determined that neither firm appeared qualified for the following reasons...(relating to experience). Therefore we are not receptive to an 8(a) set-aside. Should the SBA determine that there are sufficient number of well qualified small businesses to perform this work, we would consider a set-aside.

Case No. 41

After selection of this case it was discovered that award was made in response to the same solicitation as Case No. 13, on which 4 awards had been made for specific tasks. In the instant case, the award was made to a very large firm, for about one man-year of effort (plus 3 additional option years at the same level).

In Case No. 13 we commented on the low cost of the "highly technical and specialized" personnel said to have been required. In this case, in contrast, we noted that the cost per man-day was approximately twice that involved in Case No. 13. In the present instance the person assigned was required to have a "high school diploma or equivalent", and eight years of experience in (a broad category of) equipment maintenance — of which three had to be in more specific fields of equipment maintenance — plus one year of "technical education in (the broad field), such as military technical school, college or trade school, or correspondence courses."

Case No. 42

A solicitation was issued to cover definite quantities of various manufactured items that were to be "custom-made" to agency specifications, although the category of items in question is broadly purchased by the private sector (both for business and consumer use). Formal advertising was employed, and an extensive automated and hand list developed for mailing purposes. A decision against a small business set-aside was made on the grounds of "insufficient known small business sources." (Further, an effort was made to consolidate — at least two — requisitions, on the theory that larger quantities and "grouping" of award items could be used to stimulate competition). It was argued that when the category of items in question was previously the subject of procurement (for schedule), a year earlier, 4 of the 5 bidders were large. However, the industry is one which is well-known as having a great many small manufacturers.

In the actual event, 10 bidders responded, 6 of them small businesses. Awards were made to 1 large and 2 small businesses, for different "groups" of items. The total value of these awards was about $100,000.
Case No. 43

The procurement action, listed as a competitive award to a major manufacturer, turned out to be a sole-source, small purchase ($1,200) for "services of a first class field engineer to inspect, tighten, lubricate... and make calibration adjustments" to the manufacturer's equipment, to be performed on Sunday. The hourly rate was $12, plus travel, and was based on a telephone call. The file does not reveal why the order was not placed under an existing supply schedule contract.

Case No. 44

Under this procurement action, the agency sought to acquire a definite quantity of a particular product, and to "trade in" a smaller quantity of older versions of this product. The items were in a category that is in general use throughout the economy. The value of the award was estimated at about $300,000, exceeding the maximum order limitation of the corresponding multiple award "schedule". The procurement was formally advertised, award to be made to a single offeror, with "allowance" for trade-in being considered as an offset to the prices of the new items. The solicitation documents included a lengthy "commercial item description" authorized by the issuing agency, relating to, among other things, UL Standard, ANSI, MIL-STD-DS, and so on.

A number of protests of the specifications were received, as being in violation of law, wasteful, etc. Subsequently, after review of these protests with the requisitioner, the specifications were formally amended, and the opening date delayed. Eventually, an appeal was taken to GAO on the grounds that Procurement Regulations required award to be made to a particular offeror, whose product conformed to the requirements of the Regulations. The protest was unsuccessful.

Offers were received from 10 large manufacturers, and award made to the lowest bidder, at a price "more than 20% below current schedule", and 44% below "suggested retail". When the requisitioner was informed of this by telephone by procurement officials, he stated that he would send a requisition for the procurement of an additional number — about 40% more — of the items, "in order", as the file states, "to use money left over". The bidder "assured" the procuring agency that there would be "no problem" in exercising this option!

Case No. 45

This contract was said to be based — although we saw no written evidence — on an unsolicited proposal, and was a sole source award. The contract permitted "anticipatory costs" to be recovered for about a year prior to its effective date, and the recovery of a $10,000 contingency cost to cover a family move in the event "the contractor does not receive a follow-on to this contract".

In view of the fact that there was an "unsolicited" proposal, some features of the contractual Statement of Work are noteworthy. It covered
planning, systems engineering and mission analysis support to be provided to the (named) center". Its objective covered such items as "support to resolve project management, project planning and technical evaluation issues", "support for the implementation of the (named) system" during the Fiscal Year 1980, "review of (center) experiment plans to assure...minimum impact from schedule conflicts and maintenance efforts, and...maximum benefit to (center) long-term technical goals", "suitable experiment requirements documentation for each experiment and a quick-look analysis at the end of each experiment", and "an update of the application plan for Fiscal Year 1981". There follows one or two pages of "approach" replete with "interface", "formulation", "system enhancement" and similarly meaningful and significant words. It is difficult to imagine, based on the Statement of Work, that a truly unsolicited proposal could have been based on anything other than the knowledge that a particular installation needed "support" in conducting its official responsibilities, and preparing corresponding documentation (such as five-year plans). There was nothing available to us that suggested the same work could not have been performed by many firms.

In support of the sole source award, the only document cited was a broad determination by a high agency official that procurement by negotiation of certain "above-described services is necessary...because only the ultimate objectives and scope of the work can be outlined". The "above-described services" were specified only in terms of (a) 17 named procurement operations that might award contracts, (b) 11 identified "fields" -- a typical example being "materials sciences" -- none of which were identified in the Statement of Work, with a total estimated expenditure level of $125 million, and (c) experimental, developmental and research work for the (named) center. Since this was a Fiscal Year 1981 award, and the broad approval authorizing awards in this class apparently expired at the end of the Fiscal Year 1980, there are unanswered questions in addition to those implied above.

The specific award in the case under discussion was for less than $500,000. The award was apparently synopsized, and was to a large business (size standard 500 employees).

Case No. 46

In this case the agency made an award for a quick reaction work order under an existing master contract, for the conduct of an analytical study valued at about $75,000. A solicitation was issued, in the form of a work statement, to three firms under contract, who were to "submit a short technical proposal (three or four pages) relating to his approach in completing tasks on work statement."

The most notable aspect of this procurement is the award process employed. Despite the request for a technical proposal, the negotiation plan contains the following statement: "[Technical] evaluation not necessary...since it was made prior to award of master contract. Awardees were determined to be technically qualified in individual areas at that time". It appears from the file that some sort of discussion was then held with the low bidder — perhaps by telephone — and his "cost plus" bid accepted unchanged. However, a note states: "[The agency] auditor quoted a set of labor rates that [the
awardee] said was not the pool or mix of personnel being proposed on this work order. [A named supervisor] said 'management rate' was reasonable, and to pull another contract with quoted labor rates for support. This was done and so labor rates are accepted".

Case No. 47

The procurement action in this case covered procedures in connection with an annual multiple award supply schedule for certain equipments for which the agency had been assigned responsibility. It was determined that a partial small business set-aside was appropriate, although bids were required also on the non-set-aside portions. We estimated that sales in the preceding year were in the range of $15-20 millions, for all items covered by the schedule.

The solicitation was widely publicized through a very extensive mailing list, use of the Commerce Business Daily, and a hand list.

It is not possible to determine from the available file how many bids were received. The dominant feature of the file information seemed unusual, however, although possibly normal for this type of negotiated procurement: there were a large number of offerors who withdrew their bids. For example, an awardee in the preceding year, when called for additional information about his bid, said it was "not worth it" to deal with the inquiry, in view of the level of past sales. Another said, "We cannot meet the discount required and stay in business", in response to a letter from the agency which said, in part, "I called to request either an increase in your discount [from 20% to 40%] to meet the minimum acceptable criteria or a letter withdrawing your offer". In another instance, an offer was "returned" by the agency on the grounds that there was no 'established' catalog price, although there was no other offeror for the item, and he had not, in recent years, supplied anyone but the Federal Government with this item — there was no evidence of commercial use.

Case No. 48

This procurement action was for a competitively negotiated study involving "social and economic impacts of...", and was valued at about $150,000.

The small business aspects of this procurement are of interest. Initially, it had been determined — the file does not indicate by whom — that "there was no reasonable expectation of receiving sufficient offers from SB/LS firms to assure award", that "program objectives dictate broadest possible solicitation to obtain 'best available' expertise", and that "solicitation is for 'best idea/approach' R&D effort". This determination was apparently protested by the small business specialist: "Previous 2 RFP's for similar studies were multiple awards, with 2 reserved for SB. This time, only one study can be funded, and present organizational expertise competing has SB among it well represented. ...Development of small business participation will be encouraged, since they will be able to build on know-how". Further, it appears that the small business specialist had called for a PASS run, in which approximately 30 potential contractors were documented. Eventually an amendment to the solicitation was issued, making it a 100% small business set-aside. The size standard
was $7.5 million in annual sales.

There were 9 offerors, and 2 declared to be in the competitive range after what appears to have been a most detailed and careful technical evaluation. After discussion, however, with these two offerors, the evaluation committee reversed its ranking of the two, and, in effect, declared the former high scorer "technically unacceptable".

The successful offeror was to employ two large business subcontractors, accounting for almost half of the total dollars.

**Case No. 49**

This procurement was for "technical support" of a particular agency "in the areas of maintainability, reliability, quality assurance, system safety and human engineering for selected hardware". A small business set-aside was recommended, on the grounds that "12 of the 18 firms responding to previous requirements were small business. Out of the 9 firms in the competitive range, 4 were small business". This recommendation was accepted, and the requirement synopsized. The size standard was $7.5 million sales per annum.

The "justification for negotiation of an acquisition that is a small business set-aside" stated that "Since the actual work will be assigned on a task basis, the complexity cannot be sufficiently determined in advance for advertising and fixed price contracting. In lieu thereof it is intended to obtain proposals indicating the personnel that will be available for assignment to the contract, estimated cost, and proposed organization and management; and, after evaluation and negotiation, to award to the proposer whose offer is most advantageous to the Government... Award may be made to other than the lowest offeror..."

The solicitation specified 11,160 man-hours per year of effort, plus options of three additional years. In view of the alleged "complexity" and "task basis", it is difficult to see how the level of effort could have been established by anyone. Further, the solicitation's criteria for award required the submission of "a plan for implementation of each task in the Statement of Work", as well as many other things (such as a highly specific contractor location). (There were also severe restrictions on "conflict of interest").

In the actual event, 7 bids were received, from at least 150 recipients of the solicitation, and an award made based on "95% technical, 5% cost". It was reported that, although the performance of the contractor was not really known to a satisfactory degree, the "technical people" (the users of the "support") were not at all pleased with the procurement process, because it precluded re-award to the previously incumbent contractor — an extremely large business with whom they were "very happy". The prior "support" was at the same level.

It seems rather clear, as in some other cases, that the award was for little more than an augmentation of the user's in-house capability; that is, there was "not enough manpower in-house".
Case No. 50

This procurement action involved multiple awards to acquire a certain class of equipment assigned to the agency, with estimated cost in excess of $200 million. Indefinite quantity awards were to be made via competitive negotiation.

It is clear from the file that there was extensive distribution of the solicitation, through advertising, a large automated mailing list, and so on. The extent of the response to the solicitation could not be established, however — although it is clear there was a substantial number of withdrawals. Perhaps the salient aspect of this file relates to its strictly small business aspects. In justifying the absence of any set-aside the following points were made: "On the previous solicitation 40 responses were received from large business...34 from small...A review of participation under each...item number reveals that there is an insufficient number of small business firms to set aside any of the equipment for small business. Under each...number at least 80% of the offerors are large businesses. The only...item numbers in which less than 80% are large businesses are for certain supply items, such as...The small businesses which do make offers [for these supplies] offer them only for certain models by certain manufacturers. Therefore a setaside could not pro- vide complete coverage. Since the equipments under this schedule are of a proprietary nature, the small business firms cannot adequately provide supply items for a~1 the equipment offered under a particular...item number... We requested the PASS printout. Only 8 names were found...all were added to the handlist".

The experience of one small business offeror gleaned from the files is also of interest. In a letter to the agency asking it to "straighten out the mess" this offeror stated: "We have been in business for 47 years, with 200,000 square feet of space, $2,000,000 in cash and assets 130 times liabilities...Two [agency] inspectors came to our plant. Their demands were impractical. We have privately labeled our equipment for such companies as [major companies who obtained prior awards]. Further, [another agency] bought thousands of units, and their inspectors were here many times and approved our procedures. ...Next step was the SBA. They sent us a big batch of forms which were nonsense as they were the same forms that they would send to a group of people just going into business and applying for an SBA loan...Look at the forms and you will agree they are totally inappropriate...If you can't straighten this mess out, please send us the names of the two [agency] inspectors and a written copy of their demands". We have no information on the response, if any, to this letter, but the file does show a letter from the procuring agency to this offeror, stating in part "We have been notified by the SBA that you have failed to file an application for the issuance of a Certificate of Competency. [Such] failure...leaves us no alternative but to return your offer...and the case is now closed".

Case No. 51

The competitively negotiated contract awarded in this case was for the conduct of an executive development and training program, and provided for two optional annual renewals. After a protest by the small business specialist, this procurement was set aside for small business, defined as being at the
$2 million annual receipts level over the preceding three years. The value of the procurement was estimated at about $250,000, and "formal advertising" was deemed infeasible because of the absence of an "adequately detailed description" of the specifications.

The specifications proposed by the requisitioner were first rejected as inadequate by procurement personnel, and revised. After issuance of the solicitation questions were raised by potential offerors which made it clear that the solicitation was still inadequate; and, as a result, an amendment was issued which also extended the time for submittal of proposals. Nevertheless, there were a number of firms who found the time inadequate and declined to bid on that ground.

In the end, 8 offerors responded with 3 in the competitive range. However, only two of the latter responded to the questions they were asked. As between the remaining two, award seems to have been determined as follows:
"[The loser's] price is approximately 10% less than [the winner's]. However, the latter's technical proposal is approximately 20% higher than the former's. Therefore, [the winner's] proposal is considered to be worth the cost differential". Students of arithmetic may note that the recorded technical scores were, in fact, 72 and 92 respectively; that is, the winner was about 30% higher — if the number has any relevance.

The government had established a price negotiation plan that called for a reduction of about 5% in the winner's price, but actually obtained 10%. No negotiation was held with the second ranking bidder.

The file also indicates a Congressional inquiry on behalf of a losing bidder.

Case No. 52

This procurement was for a definite quantity of an equipment, valued at about $500,000, that exceeded the maximum order limitation in the multiple award supply schedule used by the agency. The well-distributed (formally advertised) solicitation stated that "Bidders offering other than brand name items identified herein should furnish with their offers adequate information to assure that determination can be made as to the equality of the product(s) offered".

Offers were received from 9 firms, 6 of them small. However, the file provides no evidence that a set-aside was considered.

The case is of interest in that the solicitation represented a consolidation of requisitions, some of which could have been purchased under schedule without exceeding the maximum order limitation. Further, apparently one of these requisitions (exceeding the MOL) was the subject of an order to a supplier that was cancelled the day before shipment was to be made. (This was the subject of a Senatorial inquiry). It appeared to be the position of the agency that the supplier was not permitted to accept the order, in view of the MOL in the schedule.

COOPER AND COMPANY
Case No. 53

This was a sole source award, based on a (visible) proposal from an educational institution. Whether the proposal was wholly unsolicited was not clear, since it was said to be in accordance with an official "written technical development plan." Further, it was stated that, although there was an official "requirement" for work of the type procured that dated from 1976, it was also stated that the (named) program was developed at the university, that "it would require any other source about 30 man-years at a duplicate cost of $1.5 millions to acquire the necessary expertise", and that there had been no prior, related contract in the preceding 36 months from the procurement operation in question. One cannot help but wonder how the prior effort was funded, whether its relationship to the official requirement was coincidental, and why Government funding was sought when the "methodology" was entering a "phase of trial applications".

The procurement was not synopsized, since the award was to an educational institution. The award, for about $400,000, called for about $4,500 worth of the time of the (unnamed) principal investigator in the first year, raising the question of the nature, extent and location (personnel-wise) of the university's alleged special expertise. (Would the university still have the expertise if the principal investigator went elsewhere?)

Case No. 54

The procurement action in this case called for an analytical study of the behavior of the population, and was valued at about $150,000. The recommendation for small business set-aside was accepted, with the size standard being set at $2,000,000 annually. Formal advertising was rejected, in favor of competitive negotiation, because of the absence of "an adequately detailed description" of the work to be done, and it is recorded that a synopsis appeared in the Commerce Business Daily.

The file does not indicate how much interest there was in the solicitation, but does record a considerable number of complaints about outright non-receipt of the solicitation as well as a shortage of time to respond. An amendment had been issued to clarify the solicitation a few days before the due date, and time of receipt was extended for 10 days.

In actual fact 15 offers were received, 4 of them in the competitive range. Oral and written follow-up produced no changes in technical evaluation. The firm with the highest technical score also had the lowest cost, and obtained the award.

Case No. 55

A (negotiated) solicitation was issued by an agency to select a number of vendors for a category of equipment under the agency's cognizance, with estimated sales of about $7 million. A total small business set-aside (500 employees) was employed for certain items. The normal, extensive, distribution of such solicitations seems to have been used, based on Commerce Business Daily synopsis, automated mailing lists, and so on.
There is little about responses to the solicitation or bidding that can be gleaned from the available file material. However, some information on "withdrawals" or "rejections" may be informative.

In a letter to a small bidder the agency stated "A manufacturer or a regular dealer submitting bids or proposals in his own name must agree to furnish...end items...produced in the U.S. ...by small business concerns... Since your products are manufactured in Canada, you are ineligible...and we are returning your offer". To another bidder the agency wrote, about one year after submission of its offer, "Your offer has been...reviewed with particular attention to your [original and revised] documents. In negotiating our requirements, it is our...objective to secure...the best possible discounts from commercial list prices commensurate with the Government's volume of purchases in relation to the volume of purchases by other classes of customers. We establish contracts based on offers of discounts from commercial list prices. Our practice is to obtain the same or better discount than you give your best customer. In this instance [your improved] discounts still do not meet the requirements for receiving a contract award. Hence no award is made on your...offer". To another offeror, the agency wrote "Since you have failed to respond [to a letter and telephone calls requesting additional information] your letter is returned herewith" — although discounts were acceptable. Another offeror would not supply additional copies of his offer. Still another withdrew, after a discount request, because "last year sales were so low it didn't pay". It is very clear from the file that these are not rare events.

Case No. 56

This contract was for "support services...for comprehensive program plan for...", involving the use of "systems analysis engineers", "computer programmers", etc., and was valued at about $3 million over a three-year period. The small business specialist accepted the recommendation of the requisitioner that "scope, complexity and importance of this work requires the broadest solicitation from technically experienced firms...Set-aside would be detrimental to program objectives." The file indicates that the solicitation was synopsized in the Commerce Business Daily. There is no indication that an automated mailing list was employed, but a hand list with perhaps 15 sources was used. A preproposal conference was held.

The procurement action was said to be "in the best interests of the Government, since it capitalizes upon existing talents...within the private sector; avoids allocation of scarce manpower slots...; avoids expansion of the Federal payroll for a limited life activity; complies with OMB Circular A-76; and contributes to meeting the needs of [the agency] to develop comprehensive plans..."

The file records a request to procurement officials, from the project manager, to extend the closing date "based on discussions resulting from our preproposal conference...and recommendations from outside vendors."

Offers were submitted by 7 firms. After the initial evaluation of all offerors "the [technical review] board stated that all offerors could substantially improve their positions after orals and best and finals. The rationale for this is...the perception that the offerors misunderstood the amount of effort required in the two option years. In addition, the offerors..."
need to clarify other areas of their proposals. Based on the above, all proposers were considered in the competitive range. After proposal revisions and orals, the highest ranking technical proposer was third lowest in cost. The decision is then justified as follows: "The RFP stressed that the technical evaluation was equal in importance with the cost. However, the additional cost provides a far superior technical approach and is well worth the difference." Additional rationalization was then provided for the rejection of the second ranking bidder (technically and in cost), by repeating factors nominally included in the Scores. Further, it was said, "the technical qualifications can be further exemplified by the fact that the average direct labor hour cost per hour is $18.33 for [the winner] and only $12.08 for [the loser]. This demonstrates [the winner's] initiative in placing top-rated personnel on the team."

Case No. 57

This procurement action was the exercise of an option under a two-year-old contract with a large firm, for services similar to those covered in Case No. 13, in an amount under $50,000.

A couple of points may be noteworthy. First, in the procurement action it was said that "the Government hereby exercises the option for Items...which are incorporated into this contract, restated as follows..." The description which "follows" does not differ by so much as one cent or even one comma from the original. Given the typographical errors in much of this sort of material, the coincidence is striking; but why take a chance, in view of the repeated allegations of shortages of manpower?

Secondly, the solicitation underlying the initial contract called for a partial small business set-aside — for a task that was absolutely identical, except as to the location of the required services, to another task for which there was no set-aside. Nothing in the record, or in the recollections of procurement or small business personnel, begins to explain this phenomenon.

The set-aside was justified as "necessary in the public interest during a national emergency". The size standard was 750 employees.

The original solicitation was synopsized, and a bidders' mailing list developed also from internal sources, supplemented by names proposed by small business personnel. About 60 names are recorded as recipients of the solicitation, under which 3 awards were made, each for a portion of the work.

Case No. 58

This formally advertised solicitation involved the procurement of a definite quantity of an equipment appearing on a multiple award schedule, in a quantity ($80,000) exceeding the maximum order limitation. It was set aside for small business on the grounds that there were 5 small businesses in the corresponding multiple award schedule. The extensive specifications given, which came from the project engineer, and were reviewed and approved, also cited two specific model numbers (and corresponding manufacturers) "or equal". The solicitation was broadly distributed.
Thereafter, a protest against the specifications as being "unduly restrictive" was made by one of the two named manufacturers. The project engineer concurred, and an amendment was issued revising the specifications; further protest was made, the project engineer again concurred, and the whole procurement was cancelled and reissued with new specifications.

Although it is not clear how many responses were obtained, the protesting manufacturer was, in fact, the low bidder. However, award was denied on the grounds that the items to be supplied failed to meet the specifications (with regard to an element not included in the original protest). The low bidder protested that the difference was inconsequential — and they had obviously behaved in accordance with this belief. However, it was claimed, in conversation with procurement personnel, that the project engineer would not accept this position, and the bid was declared non-responsive. A subsequent protest to GAO was withdrawn on the grounds that a decision would be too late — after procurement had already been accomplished.

Case No. 59

This procurement was for the acquisition of support services for the preparation of analyses for implementation of the Act. It was valued at about $25 million. A very extensive mailing list was developed, based on responses to the Commerce Business Daily synopsis, an automated mailing list, use of the PASS system, and so on, and a preproposal conference was held. Three awards were contemplated, in three areas, one of which was to be a set-aside for small business, defined as $7.5 million average annual receipts for preceding 3 fiscal years.

In the actual event, 4 proposals were received in response to the set-aside portion, and all deemed technically unacceptable. In the non-set-aside area, 12 proposals were received, and it was determined that 6 were in the competitive range. Eventually, two awards were made to large firms.

The selected file, which relates primarily to one of the awardees, is of some interest with respect to small business subcontracting. This awardee submitted a subcontracting plan in which 6.5% of the prime contract was to be awarded to small business. However, an inquiry from the agency after about a year indicated that about half that percentage had been achieved — to firms who were part of the initially proposed team. No further action by the agency is apparent from the file.

Case No. 60

This negotiated solicitation involved awards of contracts for a certain category of equipment, for which the agency had cognizance, involving an estimated $10 million in sales. Certain items were set aside in their entirety for small business, although the available file does not reveal the basis for this determination. The procurement was synopsized, and the solicitation broadly distributed via a hand list and automated mailing list. Contracts were awarded to 12 small businesses and 5 large, although the small business awards were not solely for set-aside items.
The available file does not answer all of the routine questions that may be asked about such a procurement, but it does contain a letter to the agency (from a bidder) which, we believe, is informative. Its essence is as follows:

"We have received your letter...rejecting our proposal... We had offered a general discount of 2.5%, plus 2% for payment within 20 days, plus free shipping. This amounted to more than 5% below our best price to a commercial customer. In discussion [you] indicated that we would have to increase the 2.5% up to 25%, in addition to other benefits. Such a discount would be totally unrealistic and far exceeds our profit margin... As a matter of fact, there is no other firm manufacturing [such products] having the performance and quality of ours. Every sale which we have made for the past several years to [your agency] would have come to us without the contract, but the Government would have paid a higher price without it. Of course, the contract simplifies procurement since tedious bidding and price justification on every order can be by-passed. This simplification is worth something to us, but certainly not the 25%...your office has demanded. We expect to do just as much business with the Government during 1981 without a contract as we would have with a contract, except that the Government will no longer enjoy the extra discount which they have previously had... It is difficult to understand your reasoning".

Case No. 61

This procurement represented the exercise of an option for items of equipment, at a cost of about $10 million, under a two-year-old contract worth perhaps $25 million, with a very large firm. The original contract was sole source, and the history is of interest, as related by procurement personnel. (The information is not in the files).

This case relates to a contract between agency A and firm X. Originally, however, similar equipment was procured by Agency B, for its own use, under a negotiated, competitive, procurement in which firms X and Y (and apparently no other) competed. Agency B made an award to firm Y. Firm Y defaulted. Firm X took over the work — at the same price — and produced many units of the required equipment (used only by Government).

Subsequently, agency A determined that its need was for "technical equipment for which standardization and interchangeability of its parts is necessary in the public interest, and procurement by negotiation [with firm X] is necessary to assure such standardization and interchangeability". Agency A also determined that "The Government does not own any data adequate for competition to obtain the configuration required. Other sources would have to reverse engineer this equipment which would be a duplication of design costs as well as prohibitive from a delivery schedule...Firm X owns the engineering drawing rights. Agency B is attempting to obtain the drawings...The planned Agency A contract will complete Agency A's requirements".

It is of some interest to note that the contract covers an option for an undetermined number of spare parts, to be priced when the option is exercised.

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COOPER AND COMPANY
Case No. 62

This procurement action involved the acquisition of 5 long-range policy studies, covering a 3-year period (with two 1-year options). The estimated value of the related series of awards was about $1.5 million. The file contains an extensive and elaborate justification of the request for approval of these "support" services, and it was determined to be appropriate to (a) use competition, and (b) "procure" rather than "assist" or "grant". Set-aside action was not recommended, and concern expressed to ensure that universities would be eligible. The requisitioner also sought "stability of funding", having in mind an initial award for 1 year, plus 4 one-year extensions.

In the instant contract, the solicitation was synopsized, apparently, and it is recorded that "a source list containing 54 names was prepared and copies of the RFP were sent to over 100 organizations...8 proposals were received, and the competitive range reduced to 2 [very large non-profit] organizations, taking account of both technical merit and cost". The panel recorded the following:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Technical Score</th>
<th>Cost</th>
<th>Ratio of Score to Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>640</td>
<td>768</td>
<td>0.83</td>
</tr>
<tr>
<td>B</td>
<td>565</td>
<td>606</td>
<td>0.93</td>
</tr>
</tbody>
</table>

Then, "oral discussions were held with each proposer in the competitive range" which modified technical scores to 700 and 505, respectively, and changed "the ratio", therefore, to 0.91 and 0.83. Award was, of course, made to organization A.

Case No. 63

This formally advertised procurement involved the acquisition of a definite quantity of an equipment covered by a schedule, in an amount that exceeded the maximum order limitation. The original requisition from the project engineer in fact shows the manufacturer, quantity, unit price, etc. Small business set-aside was denied because of "insufficient known small business sources".

The file shows that the procuring agency contacted the project engineer to request "a list of additional machines which meet the list of salient characteristics, since only one has been identified". It was explained that if the solicitation went out with this specification "we could be accused of trying to eliminate competition". The project engineer responded that his office "wants" the identified item, and that the manufacturer had assured him it was in production. The project engineer was described as "annoyed that we could not just go out and get [the requested model]. He said that [another manufacturer model] would meet their requirements, but they still wanted [the requested model]". Eventually a "brand name or equal" purchase description was employed, identifying two manufacturers and models.

The file shows there were three bidders, and the winner was the originally named company. However, that bidder actually submitted two bids —
one for the item identified by model number in the solicitation, and the second on the basis of the physical specifications themselves (corresponding to a less expensive model number). In this sense the specifications were themselves inconsistent, but this did not appear to have any bearing on the procurement agency's actions. Note that the item identified by model number would have had to be rejected on a price basis.

Case No. 64

This procurement was for "support services...to provide contractor assistance to develop and implement..." The personnel to be provided were to consist of various levels of "analyst". The period of performance was to be for 3 years, at an estimated cost of about $1 million. The requisitioner suggested 5 potential sources. A formal solicitation was issued for competitive negotiation, without set-aside (because the required "range of skills will normally not be found in a small business", according to the requisitioner), and apparently synopsized.

The file records that 15 proposals were received, and that 3 of the 5 firms on "the" source list did not respond. (Probably 10-12 were small businesses, by usually applied standards for such procurements). The proposals were ranked technically, and only the top 3 declared to be worth further consideration by the technical committee. In fact, follow-up was undertaken with 4 firms (for undisclosed reasons), and no change made in technical ratings. Thereupon the technical committee declared only the two higher ranked firms "acceptable".

In its "best and final" offer the second-ranking firm reduced its "cost plus" proposal significantly, and was judged to provide "better value" to the Government. The awardee was not on the requisitioner's source list.

Case No. 65

This was a negotiated procurement for the selection of vendors of a category of equipments, including maintenance and rental, that had been assigned to the agency. Estimated sales of the items sought were about $60 million. After a review of related predecessor contracts, the reason for the "infeasibility" of small business set-aside for any item number was stated as follows: "All but one of the manufacturers awarded are large businesses. The other small businesses awarded are dealers representing large businesses." The file shows that the solicitation was very widely distributed.

Of interest is the fact that the agency established "benchmark criteria...at 15% or 22% discount, depending on the item", although the bases are not

*For example, a "principal analyst" would have "demonstrated capability to deal with policy problems at the highest level of sophistication, to perform complex and multi-faceted analyses by creatively using state-of-the art analytical techniques, and to facilitate problems in a real world context..."
indicated. It goes on: "The discounts offered indicate that most offerors will have to improve their offers considerably."

Of interest, also, is the fact that a large manufacturer submitted a protest (before award) on the grounds that an "unauthorized dealer" had offered to provide its products, and could not meet its contract commitments. This dealer in turn protested the absence of confidentiality in his bid prior to award, and withdrew it.

Finally, it is noteworthy that, after award, it was discovered that there was a "quality deficiency" in a specific product line, although it "met the terms of the contract". The products were said to be "of an obsolete design and users are ordering them without realizing this". Various "solutions" were discussed.
APPENDIX C

SELECTED AND EDITED
RESPONDENT COMMENTS

PART I, QUESTION 10: "OTHER FACTORS" TENDING
TO ENCOURAGE OR DISCOURAGE BIDDING

PART I, QUESTION 11: PRINCIPAL FACTORS IN BID/
NO-BID DECISION

PART II, QUESTION 4: FACTORS PUTTING SMALL
BUSINESS AT A DISADVANTAGE

PART II, QUESTION 5: SUGGESTED CHANGES IN FEDERAL
POLICY OR PRACTICE

MISCELLANEOUS COMMENTS: A SAMPLING

COOPER AND COMPANY
1. PART I, QUESTION 10Q: "OTHER FACTORS" TENDING TO ENCOURAGE OR DISCOURAGE BIDDING

- Manufacturers would bid direct and cut the distributor out.
- Volume of government paperwork and time lag for orders.
- Government contracts far too complex to handle at reasonable cost. Packing specs, inspection specs, microfilm (we have no projector), many social laws — special business terms (renegotiation, etc.) — we don't have access to all details of mil specs and laws referred to by numbers — time to get data is excessive compared to commercial orders.
- The only criterion used for this award is % discount from commercial list. There is no consideration of value relationship and government assumes all manufacturers use same price mark-ups. Of course they don't. So best way to get on contract is to inflate retail price and offer government high % discount.
- "Price reduction Clause".
- The Federal Government owes us $400,000 in unpaid bills since 1975.
- After we received an award last September for the period ending June 30, 1981, we were very discouraged when we found out that there were very few mandatory users of the supply schedule contracts. In our particular product class we know of no mandatory users, and if there are we cannot find out who they are.
- Cost of advertising — chance of government canceling at whim — lack of support from our vendor.
- "Allowable" profit margin does not necessarily reflect actual resource and time commitment.
- Technical expertise of subcontractor.
- Had experienced personnel to handle all requirements with adequate back-up support.
- Location of work — West U.S.
- Never planned on bidding. Just sent the RFP.
- The award would not have been consistent with the directions in which we were developing.
- We bid on a related RFP — so cost was low.
- The solicitation clearly was biased towards large/institutional offers — we did not feel competitive — and it was clear certain institutions would dominate.
- Required personnel with experience in specific hardware and specific software applications.
- Availability of people to develop proposal (occurred simultaneously with 2 other RFP's we were responding to).
- Known preferred source.
- We knew we couldn't win.
- We did not have the specific personnel required at the proper location.
- Main problem is time from receipt of solicitation to time of opening.
- This really wasn't in our line of business.
- Requirements of having agency-experienced personnel too restrictive.
- Our company is relatively unique in its mix of R&M, Human Factors, and ILS engineering talent.

COOPER AND COMPANY
2. **PART I, QUESTION 11: PRINCIPAL FACTORS IN BID/NO-BID DECISION (REPETITIONS OF ITEMS SPECIFIED IN THE QUESTIONNAIRE HAVE BEEN OMITTED)**

- (1) lack of corporate experience with the hardware and software development for the specific application.
- (2) lack of cleared personnel for on-site assignment in the required numbers.
- Prior experience with this project and informal contact with customer personnel strongly indicated that only [the incumbent] had the required background and experience.
- Success as the incumbent contractor.
- No bid decision was made because technology required bidder to be a (____) house.
- SOW/evaluation factors biased toward a particular approach which we did not concur in.
- Would over-extend our expansion rate.
- Time to prepare proposal and form offered personnel team.
- Equipments and systems for which training was required are not company products.
- Criteria to be met were too restrictive and probably tailored for some particular organization.
- Available proposal resources were devoted to a more promising opportunity.
- We felt the procurement was influenced towards one or two specific bidders.
- Name identification.
- Match strategic growth plan.
- Difficult to substantiate capability.
- While we have strong experience and credentials in the required disciplines, this base was established largely for a different agency.
- The requirement for a testing facility. See letter to which we never received a reply.
- Excellent qualifications.
- Level of effort was much larger than we could supply, plus no arrangements for teaming.
- Not sufficient prior knowledge of requirement. A minimum of 3 months prior notice needed to evaluate competitive factors and line up technical talent.
- We normally quote on all items we manufacture that meet specifications.
- None of the products we offer were included in the invitation to bid.
- Bid must be based on commercial item description and not specifications.
- Some items not bid due to low margins. Specifications serve as detriment.
- All our bidding is done through an additional party, that takes title of merchandise. He files for us and takes risks of Government problems for his mark-up.
- We are not tooled to produce this item.
- We did not have enough extra capacity at that time.
- Requirement for approved vendor listing.
- The cost and time required to make and supply samples.
- Sole source products.
- We did not bid as specific item not of our manufacture, although we make similar items.

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All items on solicitation made by Firm X only. These items can sometimes be replaced by Military Standard items but the technical evaluation by (the agency) is not adequate to support this. Oftentimes the decision is made by physical appearance only, with no technical basis in fact.

It was a sole source product.

Only some items available through our company. In addition "Buy American" conditions usually adds large surcharge to our competitive bids, resulting in end cost being slightly higher than domestically manufactured tools.

New market opportunity and no bad checks from the government!

Quantity too great for our small business supplier, during a period in which commercial business, which yields higher profit levels, was good.

Specifications appear to have been written for one specific brand.

Requirement to accept trade-in in our opinion effectively excluded any dealer not in a position to locally inspect and accept such trade-ins.

Discount percentages.

Major manufacturer of required equipment and supplies.

Requirements too difficult in the justification of pricing.

Not this year. Paper work did not justify the labor to fill out forms. Not enough business generated in previous year's awards.

Cannot negotiate. Agency will only award on their terms and we cannot make a profit on the terms they dictate.

Government is necessary market.

We have a qualified dealer who makes offer on own behalf.

Showing the flag.

Small business set aside for item we intended to offer precluded us as a small business, offering a Canadian product.

Full mail list of potential Government buyers was not made available.

Could not meet requirements for service nation-wide even though it should not have been necessary.

Could not meet requirements for service nation-wide even though it should not have been necessary.

Solicitation was prejudicially limited to the specifications and physical parameters of a particular interest group — not small business concerns as stated in solicitation.

Significant study with high visibility.

Program not viewed as being related to the then existing corporate strategy.

Our company bid this solicitation in good faith. Agency acted in disorganized way, as evidenced by the award in late 1980. Too many amendments. Contracting officer rated C- for overall communication with vendors. Whereas we have bid a number of other situations where I would give the overall procurement process an 8 or 9 out of 10, I would give this particular procurement a 3 or 4.

Best qualified. Extensive directly applicable experience and info.

Access to well qualified subcontractors.

We had confidence we could surpass the requirements of the contract.

Exceedingly powerful capabilities to deliver highest product.

The evaluation criteria were constructed to favor a selected contractor who was unknown to us. To know the intended contractor was irrelevant. Perceiving that it was wired was all that we needed to decide not to propose.
After examining Commerce Business Daily to see who such awards were made to in the past, it was evident that firms who had previously been awarded contracts were given preferential treatment.

For an alleged small business procurement the bid was too voluminous, too many restrictions, not much time to react properly, and not specific in intent and work to be performed.

Uncertainty as to whether contract ever would be awarded.

Some of the probable competitors were better known in the field.

Could use that work as foundation on which to build.

Had much of the necessary data.

The cost of responding (due to the complexity of the bid documents) is greater than the expected return (i.e., the likelihood of award and value of award).

Checking with the agency it was determined that they would probably disqualify us because we had performed the specific work that would have qualified us technically. This was a no win situation for everyone, agency and bidders. Boils down to this: If we could qualify within the conflicts of interest requirements, we would have an outstanding chance for selection. But we were not going to the expense of proposal preparation only to be automatically disqualified on conflict of interest grounds. Anyone who had experience got that experience working with industry — which disqualified them from doing the evaluation.

We bid as a subcontractor for Region I services. Region II services, which was a small business set aside, was impossible for any real small business to bid. It should have been broken into smaller contracts.

Designed for large organization.

We felt we were part of an effective team to go after work. Our ability to put together a major team effort quickly encouraged us to bid.

We believed that few small businesses had the field project management capabilities that we had.

We are not normally interested in acting as government consultants. Exceptions have been made where the project will develop information useful to the company as well as the government.

As a policy do not work on government work.

So big we had to try.

As a university we just do not have the hierarchical structure that allows sufficient flexibility to really perform this function adequately.

We knew that the idea had been sketched out to the agency by a competitor, whom we expected to have an inside track. We also knew that our credentials, which we thought qualified us to do the work, would not convince the sponsor.

Criteria and services were clearly slanted to favor large institutional offer — an obvious "wire" for at least a class of firms.

Felt that other potential bidders had advantage in recent work performed for sponsor — hard to break into that kind of situation.
3. PART II, QUESTION 4: FACTORS PUTTING SMALL BUSINESS AT A DISADVANTAGE

- Government requires too large quantity at a time, for small business.
- Have been bidding on this type of bid for years. Have had no success since they required shipment to all warehouses.
- Amount of time to read and fill out paper properly. Have no one who is specialized in this area.
- The defined dollar limits, etc., are rather large for "small" business.
- Knowledge of procedure, set asides for special groups.
- They have the advantage.
- Large business can sell at same price as small business must buy at!
- Amount of financing available to small business.
- Size of offer and dependability of the company supplying the small business.
- Extensive test/certification requirements.
- Smaller companies do not have the staff and time to comply with all the requirements for bidding, fulfilling contracts and shipping.
- Small businesses do not have a large cash flow and cannot afford to go through long costly inspections. The manufacture and selling of the equipment must bring in results immediately in order to operate effectively.
- Extensive test/certification requirements.
- Smaller companies do not have the staff and time to comply with all the requirements for bidding, fulfilling contracts and shipping.
- Small businesses do not have a large cash flow and cannot afford to go through long costly inspections. The manufacture and selling of the equipment must bring in results immediately in order to operate effectively.
- Lack of knowledge/experience in government contracting and establishing "responsible" bidder status.
- Unawareness, lack of a marketing force, slow payment, ignorance of FPR's and DAR's.
- Financial capability, lack of adequate business systems, breadth of experience and staff, naivete in area of procurement regulations.
- Amount of technical resources and capital.
- Inability to maintain a breadth of expertise or special talents/experience required by many RFP's.
- Personnel and financial resources.
- Need for Washington office to solicit contracts.
- If not experienced in depth cannot get a job. So how do you get the experience? Chicken and egg concept.
- All aspects of government contracting favor large business except the small business set aside program.
- Resources (manpower, facilities, B&P).
- Experience and capabilities to do work.
- The prime disadvantage is lack of both personnel and monetary resources to pursue new business, complicated by the fact that a small business is unable to convince the government that it has adequate personnel resources to perform if problems develop on a contract. Need to satisfy non-repetitive requirements for relatively low dollar values.
- Government workers like to deal with large companies!
- Limited capital to sustain a small business in a large contract, aggravated by the cash flow problem created by "slow paying" government agencies.
- Lack of technical, manufacturing, and financial capabilities.
- Size of the jobs and credibility.
- Large manufacturers bid direct in lieu of supporting their stocking distributors.

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- Filling out all the certifications.
- Capability of obtaining funds to complete contract if problems arise.
- Requests based on government specifications rather than commercial stock number and we cannot afford to hire an engineer to interpret the specifications to see if our product qualifies.
- Inexperience and difficulty in totally understanding requirements and specifications.
- Delivery performance, quality inconsistencies, paperwork and reports.
- Engineering capability, delivery performance, quality.
- Availability of all necessary specifications and specialized staff to handle the paper process.
- Lack of experienced specialist to understand all data in contract quickly.
- Volume, quality, facilities.
- Opportunity to bid comes infrequently and the bid then takes too much time from other activities; insufficient information available about history of product-tooling available, etc.
- Insufficient information available regarding specifications. We do not have the manpower in some cases to follow up.
- Cost of required contract administration and quality program for standard commercial items.
- Lack of employees to spend time on bids only.
- Time required to develop contacts and get products tested.
- Margin crunch.
- Too many requirements unrelated to ability to supply product, such as disadvantaged firms preference, EEOC forms, etc.
- Costs versus net selling price. Inability to spread costs to non-government market areas.
- Contract coverage, procurement knowledge, volume.
- Because he is a small business he is overlooked some of the time.
- Extra record keeping requirements.
- Need specialist to understand how to fill out the various forms. Most are not written in normal English.
- Government will buy from large business contractors if prices are equal.
- Lack of expertise and possibly funds to adequately evaluate the solicitations.
- Limited financial resources; limited experience with federal regulations and administrative procedures.
- Ability to withstand payment delays, limited resources.
- No experience and facilities to deal with requirements on government contracts.
- Type of effort/product being solicited may require large-company resources.
- Marketing coverage necessary to follow business and procurement cycle from requirement to contract.
- We compete with [a very large corporation]. Their sales penetration and political influences are immense.
- Small businesses do not have the marketing funds to compete with large companies, and cannot fund the constant lobbying that is required.
- Recently, size of awards (in man-hours/$'s) overwhelms small industry and truly limits the number of potential bidders.
- Lack of specific knowledge and personal relationship with the technical initiators.
Advance marketing information often not available. It takes $'s to track upcoming solicitations. Often the Government would much rather have a larger company under contract, more resources available to their project, etc.

Federal Government clearly prefers to deal with big business.

Funding available for marketing/preparing proposals/gathering data.

Inside track; costs of preparing offers relatively greater for small business.

Lack of knowledge of proposal opportunities. May lack skills in proposal development. Some contracts too large for small business to staff.

Higher discounts requested of smaller contractors than large companies.

Do not have staff to specialize in the Government contract complexities.

Lack of attention to bid.

Costs of paper work prohibitive.

Ability to handle volume of paperwork and time to deal with the almost impenetrable bureaucracy.

The size or quantities needed are too great for most smaller local type business.

Exactly the same factors that put small business at a disadvantage in the commercial sector.

Our costs are too high to compete for Government business — our suppliers usually bid against us and sell below our cost.

Finding sources of Government business; time from tender to award; and resource commitment.

Small businesses cannot dedicate resources to find and scrutinize Government contract opportunities. Information access is limited.

Knowing where to go to get contract.

Small business cannot afford to develop specialists to handle Government applications. Also profit margins are low and effort high.

Small businesses cannot maintain the marketing and other indirect overhead required to satisfy the government requirement of bids. A small contractor cannot afford to alter his whole accounting structure to be successful and profitable under a succession of government contracts and have the same operation be competitive in general business. It's either fish (government) or fowl (business). They won't mix with the government's present procurement regulations.

You must have a full-time person to figure out the paperwork.

Small business needs same overhead and engineering costs as big business, but big business pays for them through their negotiated contracts.

Size criteria too often preclude response. Government contracting activities are nervous about small business awards.

Cost and extensive time involved in submittal and review process. Being an unknown, thus by implication, an "unsafe" choice if anything goes wrong.

Cost of competing, need for legal accounting, audit support to stay out of trouble, feeling by CO's and COTR's that small businesses cannot defend themselves, establishing target for anything that goes wrong.

Marketing budget. Occasional arbitrary government restrictions — either explicit or implicit.

Lack of knowledge at contracting agencies on how to maximize use of the small business technology.

Primes steal good people from service contractors.

Marketing and political factors.
Many solicitation technical requirements are overstated so as to automatically disqualify small business. Also SIC codes are, many times, used that define small business as 500 employees. This is another attempt by major U. S. government procurement activities to make awards to medium size firms instead of small businesses in the 8911 SIC code. SIC code 8911 can cover most engineering and technical service requirements.

Cannot afford the wining and dining and cannot promise employment opportunities.

The various definitions of small business.

Depth and breadth of technical skills. Limited facilities.

Size of some procurements, access to information, costs of marketing.

We do not maintain a Washington office so we can't get a feel for what's implied by the wording of solicitations, so large firms have a much better chance of relating to their criteria.

Knowledge of offerings, lack of contacts, etc.

Not enough breakout of large requirements.

Start-up costs (even with progress payments); time intensive nature of government work; market research costs are prohibitive.

Application process for awards is time-consuming and exceptionally costly, considering that a relatively small, inexperienced firm has almost no chance of being accepted.

Inability to support high market and credentials-building process.

Government tendency to give inordinate weighting to academic degrees.

Section 8(a) limiting awards to "disadvantaged" contractors without qualifying.

Government has a tendency to work with Washington-based firms, based on personal relationships.

False perception that big is more stable and can deal with labor or other contingencies better.

Lack of experienced personnel in dealing with government procurement practices.

Bureaucratic preference for "safe" decision means preference for well-known big firm.

"Inside tracks", lobbying, the requirement of previous experience with (a certain) agency.

Preproposal and proposal costs; lack of formal marketing staff; and generation of sufficient profit dollars to fund expensive marketing efforts.

Failure to strictly enforce SB set asides or to prohibit large business using "front" SB applications.

Sheer lack of physical presence and the inability to become known by the various agencies.

RFP evaluation by the government allows them to disqualify any contractor they want to. It seems that any contract that is of a substantial dollar value is awarded to big business.

Limited marketing umbrella.

Costs to find out what is happening.

Large business can put a large team of proposal writers on the job to research and write exactly what the review board is looking for.

Allowable bid and proposal budget formulas used by DCASR favor larger companies while penalizing small growing companies. This is because formulas are based on historical expenditures.
- Marketing, personal contact.
- A major area of increasing concern is the tendency for "large" contractors to use a "small business" as a front to get into set-aside work on a subcontract basis.
- Corporate experience requirements.
- Size of procurement.
- Lack of "inside" knowledge required by RFP.
- Government buying only on cost without consideration of all factors.
- Product modifications often desired too costly for a small manufacturer, and of no benefit anyway.
- Large business participation in previous contracts and subsequent specifications based on product of the large business.
- Time involved and risks.
- Lack of knowledge of government procedures and hard facts about potential contracts.
- In our industry the large business manufacturers sell direct to government at considerably less (in volume orders) than they sell to their own dealers.
- Small business needs larger mark-up.
- Cost of overhead as a percentage of sales creating a pricing disadvantage.
- Government failure to appraise comparative value of related products.
- Personal visits by lobbyists have too much influence.
- Large businessmen in many instances will buy a contract to cover existing workmen and overhead, using the government business to cover valleys in commercial production.
- We must make a profit to live and cannot cut our throat just to obtain an order.
- Requiring statewide service from one source.
- Obtaining adequate funds.
- Volume requests limit contract awards to large companies.
- Personal contact, red tape, availability of lines, large company monopolization.
- Need for track record in a given area gives encumbent (large) contractor an advantage.
- Lack of experience and inside track information.
- In the type of work we pursue there are very few small business firms with the resources necessary to compete.
- Cost of becoming "visible" to contracting and technical personnel (government) responsible for procurement.
- Larger companies can "underbid" and absorb losses in short run for longer term gains.
- Amount of time/money that small business can invest in marketing.
- Primarily marketing costs: getting around to visit primes. Secondarily the primes have in house capability which they try to stretch into specialty areas for training.
- Knowing of opportunities in advance. Also former employees of agencies now in consulting get inside track.
- Cost of tracking opportunities and cost of preparing response to RFP in Federal format.
- Small businesses pay higher interest on borrowed money, which interest is not an allowable item of cost.
- Getting first job seems to be monumental hurdle. Government knows before solicitation who they want to do the job!
Award size, cost of proposal preparation and preferential use of minority firms.

Need for regular relationship with contracting offices makes a high "entry cost" to work for new agency.

Massive paperwork and accounting requirements.

Overstatement of government requirements — goldplating.

Requirements are biased towards large firms. Too many bureaucratic requirements. Expenses of proposal preparation.

Limited skills and facilities.

Amount of time and dollars required to pursue business. Inordinate amount of paperwork. When contracts obtained, long wait for money often occurs. High interest rates and interest is not allowable cost!
4. PART II, QUESTION 5: SUGGESTED CHANGES IN FEDERAL POLICY OR PRACTICE

- On-time payment, better progress payments, reduction in reporting and regulation requirements.
- Greater emphasis on business and technical assistance rather than "set aside and abandon".
- Expedite procurement and payment cycle.
- In the technical services area increase the period of performance — fiscal year to fiscal year.
- More aggressive set-aside program. Closer scrutiny of 8(a) program.
- More open competition, less sole sourcing.
- Contracts for major programs satisfy the government's fiscal management needs; but cause serious problems to small business because of the contract gaps in October-November, and the long procurement lead times. Use longer period contracts with options pegged to multi-year funding.
- Adopt a policy whereby subcontracts awarded from large business to small business would be specified prior to the award of a large business contract. This would not only increase small business participation but enable the small business to receive the experience and expertise of large business and more productively compete on open competitions.
- Insist on observance of PL 95-507!!
- Raise dollar limits which require cost and pricing data.
- A "real" effort to expedite payment of invoices due. Increase the dollar limit on set asides: there has been little increase in the past 5 years to keep abreast of inflation.
- Less red tape to comply within the procurement and contracting areas.
- Follow the spirit and intent of procurement regulations.
- Issue purchase orders, and for smaller quantities. The large supplier or manufacturer will not accept small orders.
- Do away with minority "set aside" and minority preferences in awards.
- Buy standard products.
- Use a price differential factor between large and small business. Reduce size standard to 50 employees.
- Force prime contractors to subcontract a certain percentage of the total contract.
- No discrimination advantage for minority business — we are all in the same boat!
- Create new small business categories to have 50 or 100 or less employees.
- Financial aid.
- Elimination of unnecessary specifications and inspection procedures which greatly increase costs to the bidder.
- Shorter, more easily understood solicitation documents.
- Less restrictive product material descriptions.
- A time limit of acceptability or disapproval on source inspections.
- Allow manufacturers more latitude in pricing to permit distributor (usually small business) participation.
- Use more small business set-asides.
- Not accept large business offers even if sources are few.
- Do away with the certifications and base the award on price and delivery.
- Conduct more educational workshops for small business.
- More small business set-asides.
- Speed up process for awards to small business compared to large.
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- Actually requiring a small business subcontract would be helpful. This could be done in major service contracts.
- Allow cost of money, pay interest on late payments by government, ease requirements for social action, etc.; provide an ombudsman or source of information on DAR and other government contracts questions — small companies don't have expertise in government accounting/contracting requirements — could use source of information who is not involved in award/administration/audit process. Make some accommodation with IRS. IRS charges high penalties for payments just days late when the reason they are late is the government may take 30 days to 6 months to pay.
- Reduce costs of submitting proposals; reduce the non-technical paperwork.
- Active information flows from Federal Government; that is, bidders' lists circulated from each agency.
- Pre-select qualified bidders and then negotiate sole source — or do a better job of writing RFP and evaluating proposal.
- Small business should be better able to procure small contracts (10-100K range) with greater ease in procurement. We are often best qualified, and a best buy for government, but procurement policy precludes getting a contract.
- Use the entire budget of the Small Business Administration to support participation by small and disadvantaged business in Government contracting.
- If the government issues a solicitation for a specific part number by a specific manufacturer, the contractor should not have to do any testing. All manufacturers are going to stand behind their stated warranties. Most manufacturers and suppliers will exchange any piece of merchandise that is defective. Any price increase should be allowed to be passed along. How can the government ask a supplier to predict when an increase might come along and how much the increase will be, and then make sure that all this information is included in your price that you quote?
- Use standard commercial stock number — from any manufacturer.
- Do not require small business to comply with onerous regulations, requirements, and restrictions of government.
- Simplification of details and procedures and decisions on products and vendors, based on quality, price and delivery, and not on country of origin.
- Simplify solicitations and paperwork.
- More realistic criteria used in the determination of business set-aside for small business.
- Fewer weird and unconventional specifications.
- Move closer to standard commercial terms on orders.
- Fewer restrictions, small quantities.
- Back off on some of the red tape and inspections.
- Government should become familiar with capabilities of companies being solicited. Use rifle approach, not shotgun. Provide all information with bid request.
- More negotiated contracts with competent small business companies.
- Improve size criteria.
- Increase government consciousness of small business strengths.
- Faster evaluation. Less onerous proposal requirements. Increased allowability of B&P costs.

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- Reasonable size of competitions. Fair treatment by CO's. Contract extension when support is acceptable.
- Use more IFB's (vs. RFP's and RFQ's) with capability audits.
- Restriction of bidding to small business for high technology requirements when more than one viable small business bidder exists.
- More definitive contracts — less undefined task type contracts where staffing and planning is a real problem area.
- Faster, more sole source, procurement.
- Government must recognize that high technology no longer rests within the large corporations. Some procurements are overburdened (prematurely) with sophisticated CDRL or ILS functions that make it prohibitive for small business (start-up costs).
- Exercise greater care in qualifying suppliers.
- Revise small business classification. Dollar measures are meaningless in inflated terms. The standards should be number of employees by business areas.
- Utilize the SIC codes of 8911, etc. as the small business set-aside criteria. For engineering and technical services, eliminate the "500 employees" as a standard.
- Restrict former Federal employees and retirees from contracting for work with the government for a period of 2 years. Expand SBA's PASS system to all Federal agencies. Use consistent methods.
- Drastically decrease the importance of past experience of a firm in awarding contracts.
- More negotiated work below $100K to $200K range.
- Reduce paper work required to bid. More specifics on required work output, and allow contractor to determine quality or quantity of work force.
- Small business set-asides.
- Allow greater profit fee rates for small business. Create a new type of contract between fixed price and cost reimbursement — government and contractor share 50% of overspending and underspending!
- Unbiased competition. Mechanism to monitor fair treatment in evaluation. No stipulation for previous experience with the agency. Impressionistic perception has no place in the assessment of a technical and cost proposal.
- Partial reimbursement of those who make it into the competitive range; for example, the top three bidders.
- Large business should be encouraged to joint venture with small firms.
- Reduce the size standard for "small business" to less than $2 million.
- More pre-qualifying to limit number of proposals prepared.
- Change definition of small business. A small company of less than 25 people cannot compete with a small company grossing $7.5 million per year.
- Hold a local seminar each year at a regional office outlining what a small business must do to obtain business. Supply names of prime contractors to small businesses when awards are made. More information on a daily basis as to where small businesses can solicit agencies, Federal businesses and other companies for business or awards.
- Go to specific quantity bids, rather than term contracts.
- Better progress payment policies.
- Consolidation of military and civilian quality assurance and contract administration organizations. Eliminate inter-service procurements. Have one organization do all contractor evaluation.
- Simple instructions.
- More set asides.
Many opportunities are unnecessarily complex requiring such scope and magnitude that it is not possible for a small firm to respond: for example, forecasting costs, amortization, training for 5 years in advance, or world wide use requirements.

- Simplify the forms to some 3 or 4 meaningful pages, with quality and price the primary concerns, for commercial items.
- More set-asides.
- Clean up the application of SIC codes and size standards.
- Encourage small business unsolicited proposals and sole source. Eliminate pseudo-competition held for "competition" sake.
- Raise dollar size standards to reflect inflation.
- Raise size standards to 1000 (or 500 professionals).
- More aggressive efforts to assist small business to market their services. Lower the size of small business to the 150 to 200 people range from 1000.
- Establish requirements for greater amount of subcontracting to small business by large prime contractors.
- More small business set aside. Limits on proposal length. Don't let firms bid people they do not have on board. Many firms use resumes of people who will never work a day on the effort. No controls!
- Set asides. Directed level of small business subcontracts; use of multiple awards rather than winner take all.
- Encourage enforcement of subcontract provisions.
- Forbid "large" contractors from using a "small business" as a front to get into set-aside work on a subcontract basis. Only a small percentage of any given set-aside should be allowed for subbing to a large business.
- Reduce the requirements for corporate experience and emphasize personnel experience.
- Mandate and enforce percentage subcontracting.
- Raise the $7.5 million size standard to reflect the effects of inflation.
- Eliminate statements of work that require inside information.
- Recognize costs involved by the independent dealer who participates in a government contract involving a small business manufacturer.
- More reliance on Multiple Award Contracts.
- More complete description in Commerce Business Daily, and better indexing.
- Have a Government representative who knows something about the product or service he is negotiating for. Most have no knowledge of the product.
- Give the SBA legislative teeth to help small businessman in dealing with the government.
- Simplify procedures.
- Set discount rates by Industry Benchmark at same low level for all competitors.

A small business concern can be investigated very quickly and at low cost, and should prove his ability, then most of the Federal risk is removed. Federal agencies often allow the lowest bidder to win the contract, regardless of their past shoddy work and asking additional money to redo the contract. It is plain to realize that a contractor who bids too low can't make money, and has found some way to cheat the system. Therefore, a contracting officer should remove his name from future bid solicitations.

Government must try to understand the problems of costs and distribution of the Small Business, and not coerce them into unprofitable and losing contracts.
Simplify contract specifications. Make all governmental agencies mandatory users of Federal supply schedules. Improve promptness of payments.

- Process bid in more timely manner.
- Procure for government agencies where located. Most business could compete on a local level but not on a regional level.
- Increased set-asides applicable to more product classes.
- Direct solicitations of small business by government procurement officers.
- Easy-to-get bid specifications. Ask who is in the industry and give reasons for not selecting all competitors.
- Increase information flow for small business — bidder's mailing list especially.
- Make renewal of contracts easier. Government buys at market price from dealers.
- Simple short term bids and more latitude to the contracting officer, as any purchasing agent has.
- Easier quotation request.
- Cut down red tape and paper work — loosen up specifications.
- Revise methods of developing specifications and requirements.
- Set standards to be same as normal commercial practice.
- Reduce red tape.
- Stop writing specs on this category. Eliminate government warehousing. Permit department and agencies of government to buy against competitive quotes (3) from local dealers on an as needed basis (for off-contract purchases).
- Change definition of small business to less than 250 employees.
- Simplify.
- Reduce paperwork, that is, reports. Put contract in simple English.
- Eliminate "benchmark" mandatory discounts that disregard offerer's commercial sales methods.
- Reduce lobbying activities to transmittal of factual data.
- Set aside a portion for small business when large volumes are being procured.
- Do not allow manufacturers to bid. We cannot compete with the factories.
- Localize procurement.
- Create simple and less restrictive procedures for bidding and performance.
- Improve attitude toward small business unsolicited proposals.
- Have government scorecard for participation extended to include sub-contracts.
- Reduce the time between solicitation and contract award. Pre-competitive screening. Get competitive efforts down to 5 or less. Use oral presentations or problem discussion sessions.
- Disqualify all companies located within 100 miles of Washington, DC.
- Allow interest as a business expense, raise fees, and prequalify bidders. Small business size standards need to be re-evaluated for some SIC's.
- Be more realistic and discerning in selecting potential set-asides which can reasonably be expected to be handled by small businesses (to minimize flow-through abuses).
- Consider changing small business definition to smaller size, for example 30 employees, one million in sales, etc.
- Have non-procurement agency or department review solicitations and oversee awards. Require large firms to sub. Reduce "small business" size.
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- Simplify procurement procedures. Enforce 95-507.
- A system must be established requiring the government to set up an equitable inspection system which would require expedient inspections by knowledgeable inspectors. A time limit on each order should be set and met.
- Government organizations using Notes 62 and 63 of CBD should specify the geographical area and be held to account for selection from that area or drop the requirement for geographical area in its entirety. Eliminate the "business management" proposal. Make the resume form, Paragraph 7 of SF 255, the only resume format for all engineering proposals.
5. MISCELLANEOUS COMMENTS: A SAMPLING

- Too many government agencies accept bids on PRICE only. Cost realism is totally overlooked, especially on task type contracts or BOA's. For example, the government gave a job out with $3.50-$4.00 engineering rates (loaded including OH and fee).
- Current inflation rate prevents us from quoting a fixed price over a period of one year in advance. We will quote on individual requests for current shipment. We cannot quote on term contracts with inflation rampant.
- Especially difficult is the multitude of specifications that do not affect products' performance and which are not readily available or understandable, such as requirement of manufacturer's symbol on the head of a cap screw which does not aid performance at all but for which we have to request a deviation from the specification.
- Major risks for a small manufacturing firm is time. We agree to make a tool in a certain time — if we default the government penalizes us. However if we meet the deadline, but cannot get inspection to pass or fail the tools, we have no recourse but to wait. This is extremely costly to a small manufacturer.
- Our last large contract was a loss for us. We met the deadline but the government would not pass or fail the tools for a month. That month of $38,000 worth of tools lost us any profit we would have made.
- The equipment groupings required to qualify [in this solicitation] are much too large for fair competition. These groupings are generally consistent with the qualifications of the present incumbent who has had the program for several years. In some cases it is virtually impossible to compete unless other offerors proselytize from the incumbent.
- On occasion it is in the best interest of our business area to avoid entering competitions not consistent with our business plan.
- Inadequate rewards for good contract performance and conversely, no penalties for companies that do not perform well. Such companies continue to receive awards and some keep receiving awards on "buy in" bids.
- Very few competitive negotiations are honestly open to new firms. Generally they are available only to the incumbent or a few selected "favorites". Cost is not assigned significant points in the evaluation. There is no review organization to challenge the evaluation board's technical opinion. Most competition for cost reimbursement contracts is a sham.
- PL 95-507 was intended to force subcontracting, but prime contractors and the PCO's simply ignore it!!
- As a small distributor we cannot foresee the price increases our manufacturer might pass along to us; and, in turn, we are not allowed to pass this along to the government.
- Unless we have a commercial stock we do not submit a bid. We do not have specifications from our suppliers so it is difficult for us to match the specs on a specific bid.
- Some specifications do not recognize industry standards or are not current with what is being accepted in commercial market. Restrictive specs preclude product function and/or application.
- Low price governs over quality at all times. Life cycle testing and return on investment do not play a part of evaluations.
Many contract clauses do nothing but increase the cost of the product. When solicitations are compiled, many of them look as if someone shuffled the DAR and dealt out any sheets that didn't fall on the floor.

Unfair competition when awards are made to incompetent low bidders who later obtain price increases on technicalities or never deliver. Unfair competition when consistent low bidders are allowed to be disqualified from some bids, and others continue to bid until the price is right.

Government specifications tend to be so low that similar products have little or no appeal to private industry. To reach both markets (government and private industry) one must manufacture two different product lines — quality for industry and junk for the government. This is caused by the government's purchasing based on price alone.

We will not accept any government business which requires us to certify compliance with special laws or regulations if we would not otherwise be subject to these laws or regulations.

Indefinite quantities tend to cause problems in scheduling of production. Cannot anticipate order.

As a very small business we do not have a file on all the necessary specifications as listed in each solicitation. By the time we receive the solicitation specifications, the date for returning our bid has expired. Because of this, we cannot quote on any solicitations that we received until we can build up a library of specifications.

So little data is provided in the Commerce Business Daily it's impossible to assess actual needs without requesting all advertisements in our general area of expertise.

The Government's habit of setting an estimated peak monthly potential which is almost as large as the guaranteed minimum quantity is a stumbling block...particularly with an item which is a slow seller commercially.

One risk of acceptance of a government contract (12 month basis) in terms of the inflation of recent years is that a typical cycle of bidding upon and finally completing a 12-month contract could be reconstructed as follows: (1) Preparation 1-1/2 months; (2) contract duration 12 months; (3) 105 days delivered time for orders received last few days of contract; (4) total — 17 months. Quite obviously, the ability, particularly of the small business to project manufacturing, materials, handling and shipping costs 17 months ahead, is rare. There is a definite risk of loss on any closely computed bid when the Government lumps its orders in the last half of a contract.

The primary reason for limiting our participation in certain areas is the fact that many items require bid samples, without regard for quantity of buy. This can become so cost prohibitive that we won't even bother.

Management and "boiler plate" response such as capabilities should be on file at various agencies (prequalification) to eliminate added costs to proposal preparation. Often the government doesn't adequately budget the procurement, and it is cancelled after company has wasted the proposal effort.

Too many of the small business set asides are for machine shops, maintenance, or computer programming for which it would be most difficult to find a "large" bidder.

CBD a loser for small business, as are Bidders' mailing lists.

I have consulted for other groups which have attained Federal contracts. They have said that the best way to get Federal contracts is to live in the DC area and know the project officers.

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Civil servants have a non-profit-oriented mentality, with resulting emphasis on activity rather than results, numbers rather than quality.

For a small business not under the 8(a) umbrella, the probability of obtaining awards in competition with large companies is minimal. Additionally, the expenditure of time and personnel to present Technical and Cost Proposals as separate entities presents the possibilities of rejection of one or the other and the "pirating" of technical ideas and approaches which are eventually made available by government suggestion and/or direction to the successful bidder. Then there is the political arena by which large contracts are awarded.

Many solicitations are "locked-in" to firms or individuals, even though the solicitations are supposedly "competitive". Since the cost of preparing a bid of this type can run as much as $10,000, the risk of bidding is excessive.

Too many pseudo-competitions that are "locked" for someone before solicitation is issued. Too often government accepts unrealistically low bids from irresponsible bidder. Government uses low bid techniques to squeeze small businesses. Not enough R&D contracts to small businesses.

It seems a waste of our time and money to bid on any contract requiring a formal proposal subject to selection by government evaluation boards. These so-called experts pick apart our proposals until they select the contractor they wanted in the first place. This has occurred only on unrestricted solicitations that normally are of large dollar amounts. Big business wins 90% of the time. I have never had this problem with small business set-asides.

We were confident that our technical proposal would be selected. We were right on this prediction but at the last minute, the award was given to another organization without fully explaining why.

We will not bid on cost-type contracts for commercial items because we consider our commercial costs proprietary. We will not bid commercial items against Federal specifications because we have never seen one that is complete enough or current enough to describe our commercial item without taking exceptions, which makes us "unresponsive".

We did not submit a bid since we knew from experience the government would evaluate discount percentages in total rather than evaluation of equipment.

As is the case with many quasi-disguised personal services "omnibus" efforts, it was impossible to evaluate the relative emphasis/loading anticipated for the many task areas. Thus, it was difficult to evaluate our relative strengths and weaknesses as a potential competitor. This breadth of approach is also used when "wiring" a procurement for an incumbent; thus, not knowing intended weighting of the anticipated workload in the various technical tasking areas, it was not possible to estimate how the evaluation criteria would be applied.

Most Contracting Officers known to us are very considerate, competent people.

The main problem is the dictatorial attitude of the Contracting Officer.

Procurement solicitations require, at times, impossible testing/qualifications that we as dealer/distributor cannot provide and our manufacturer will not conduct.

Procurement officials know nothing and I mean nothing about the products they are buying. They know even less about the industry that the product represents — I know — I have been selling to them for 12 years — exclusively for about 10 years — they are almost non-functional.
• The usual successful bidder is one who skates on the edge of the spec. and delivers a product which is actually not in the best interests of the government.

• One of the annoying factors is the bidding on a spec., while a perfectly acceptable commercial product is available.

• Our single biggest problem is the complete rudeness shown to our company by the way contract people respond, if you are a small firm.

• Government contracting is a facade. The government makes it appear as though you'll be receiving great volumes of business per award. In fact, you receive many small orders (which are very expensive to process). Your profit margin is cut to the quick in order to receive the bid in the first place and any profit that was calculated is gone because of too many small orders and never being paid on time. We feel that government spends more money on the procedures and technicalities of setting up awards than they save on the other end, i.e., they defeat their own purpose.

• It has been my experience that many competitively advertised procurements have statements of work and tasking which require or imply that a substantial degree of professional technical/engineering expertise is necessary for successful performance — when this is not the case. These procurements are simply disguised personal services efforts needed to keep federal paperwork moving and maintain bureaucratic inertia. Such puffery is necessary to get the procurements funded and advertised. Further, the low-bidder either has no intention of providing the level of skill and experience required or expects additional funding to complete the effort. To bid such procurements as advertised is to lose them, buy-ins notwithstanding.

• Basically it is difficult for a small contractor to maintain a high profile with the procurement personnel in each office in each city that he would like to do business. A once or twice pass through the office with occasional telephone contact just is not enough to compete with the majors.

• As a small business we find that the federal government: (1) Does not willingly accept unsolicited proposals, does not know how to handle them and has a "not invented here" attitude — most unsolicited proposals are rejected without good cause; (2) Has taken our unsolicited proposals and made them as tasks to contracts that were being performed by large businesses; (3) Has taken our unsolicited proposals and converted them to 8(a) requirements.

• The government makes no real effort to give small business work except as a political action; that is, when the 8(a) programs were initiated they did not really affect large business — they simply took business away from the small business market and made it 8(a). Regular small businesses were hurt by this removal of a portion of the market.

• Extremely difficult to bid on contracts that require specific personnel with specific qualifications that must be available ahead of time. One can round up personnel but can't keep them on payroll or on a "string" for 5 to 8 months while Government makes up their mind. No one can. We must all play a game and hope we can fill the bill. One bids knowing that all personnel will not be available to you or other bidders; and that you will win or lose on resumes. Bidders should be required to analyze the problem and provide a management plan on how the contract will be operated. When choices are made on resumes the contract is normally suitcased for someone that just happens to have those persons — automatically.

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- Some agencies set arbitrarily low fee limits and have policies favoring awards to not-for-profit organizations.
- Find that most bidders' mailing lists are very poorly maintained.
- There is too much "farming out" of routine work — services that could be accomplished with the work forces in the Government offices, and a general lack of recognition, or sorting out, of the important or highly-technical work that is beyond the built-in competence of these Government offices. The solution, of course, is either less people in Government and a recognition of service contracts, or an improved work ethic and acceptance of responsibility by Government employees — neither of which is easy to accomplish.
- Time lag in contracting with Government agencies is excessive, after the technical decisions to proceed are made. This results in difficulty in my personnel assignments or in "carrying" people until a signed contract arrives. This is particularly distressing in follow-on work, where the technical community (the real customer) needs continuity, but contracting procedures often result in gaps of 2 to 3 months.
- The best way to encourage small business participation in Government acquisitions is to provide to small businesses the following critical marketing data: (1) Advance notice of pending acquisitions in sufficient time to prepare presentations and visit procuring agencies before the "curtain" is dropped; (2) Sufficient information regarding such acquisitions so that all businesses, large and small, can determine the credentials required for success in the subsequent competitions. It is proposed that a document similar to the CBD be published that provides such information.
- We are considered large by Government Standards. This is in error because we are a tiny conglomerate of small companies.
- We believe there is something wrong with the government purchasing practices which allows for the highest priced supplies to be the highest percentage of sales on a multiple award purchase plan.

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## APPENDIX D

**TABULATION AND STATISTICAL ANALYSIS OF SURVEY RESPONSES**

1. **RESPONSE AND NONRESPONSE**  
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1 RESPONSE AND NONRESPONSE

1.1 RESPONDENTS TO QUESTIONNAIRE

Questionnaires were sent to a total of 1,037 names and addresses that were obtained from one or more lists in the three agencies studied, with the following results:

- 282 questionnaires were returned. One of these was clearly malicious, or at least a hoax, and was discarded. A second was discovered to be a precise duplicate of another from the same large firm, sent from a different location; and it, too, was discarded. This left 280 questionnaires which were used in later tabulations and analyses.

- 51 letters were obtained from persons who declined to complete and return the questionnaire. Almost all of these were from very large firms who felt it desirable to claim that, since they were large firms, the questionnaire must have been misdirected — despite our clear request for response from such firms. We assume they viewed this as better public relations than ignoring the request or simply refusing to participate. (The main alternative explanation would seem to be that some firms route such requests as ours, for response, to non-English-speaking personnel. Follow-up to a few of these elicited no response whatever, tending to confirm that there had been no misunderstanding of the initial request.)

- 48 questionnaires were returned by the Post Office as "undeliverable". This may provide some clue to the currency of agency mailing lists. Since, however, about half of these also had a "postage due" notation — when, in fact, the postage was correct, and since one of these was to a name and address we had inadvertently used before (in connection with another case) without having it returned, there is certainly room for the suspicion that the performance of the Post Office was something less than ideal. (In fact, a few nonrespondents whose questionnaires were not returned to us by the Post Office, to whom we sent a follow-up mailing, claimed non-receipt of the initial communication; but we place little weight on this.) This group is better described as "undelivered" than "undeliverable".

- Treating the undelivered as if they had never been mailed, we may describe the response to the mailing in the following terms:

  - 33.6% of those who were sent the questionnaire responded — 28.4% with a questionnaire, and 5.2% without. Since this response was based, essentially, on a single mailing (follow-up having been undertaken for only about 3% of the nonrespondents) we consider the response rate remarkably high.

  - The corresponding percentages by agency were: Agency 1 — 32.9% response, consisting of 27.8% with questionnaires, 5.1% without; Agency 2 — 37.8% response, consisting of 31.4% with questionnaires, 6.4% without; Agency 3 — 33.1% response, consisting of 26.9% with questionnaires, 6.2% without. Since the mailing lists for one of the agencies were based almost entirely on hand lists for the chosen
cases; for a second agency based almost entirely on the use of automated lists that were not necessarily highly appropriate to the specific cases (plus known bidders); and for the third agency based on a more intermediate mixture of hand list and automated sources (frequently without knowing who the bidders were on the selected cases), we consider response rates by agency to be remarkable for their uniformity, especially in view of the small sample sizes.

1.2 NONRESPONDENTS TO QUESTIONNAIRE

About two-thirds of the presumptive recipients of the questionnaire failed to respond at all; and except for that fact, we know next to nothing about them. For example, we do not know, generally, to what extent they are "large" or "small" businesses (by any standard), nor why they did not respond; nor do we know even the proportion of them that may not actually have received the mailing without its being returned to us by the Post Office. Hence we ought not to ignore the possibility that nonrespondents represent a population that is radically different from that represented by respondents, and that the data assembled herein are a poor characterization of the population that had prior contact with agency procurement operations. Even though the present effort was conceived as an exploratory one that would yield only promising possibilities for further study, so that the possibility of nonresponse bias was not of overwhelming importance in this first phase, some speculation about nonrespondents may be in order.

The busy executive who obtains a request such as ours might be inclined to ask, first, "Will I, or the organization I represent, be any worse off if I simply ignore the request, and save some time and effort?" Since the answer to this question was obviously in the negative, many decisions against response no doubt imply no more than we have just indicated.

Another possibility is that the person responsible for a decision relating to response might have chosen to ask "Might we gain something by responding?" To this the answer could have been positive or negative. Overwhelmingly -- 94% to 6% -- respondents indicated an interest in seeing the results of the study, presumably not because of academic interest but because of the possibility of obtaining some small new insight into Government procurement practices; and the easiest way of keeping track of the study may have been perceived as being to participate in it. Those who did not see this possibility of some gain would no doubt be less likely to respond, but it is hard to imagine that such a difference in perceptions is substantially related to the factors affecting participation in Government procurement. It would be surprising indeed to find, for instance, that these two groups would decide to bid or not bid under conditions that were different for the two groups.

Of course, nonresponse might have been related to the nature of the specific information sought. For example, some information might have been seen as confidential, in the sense that questionnaire recipients did not want to risk helping competitors, but while this may have differentiated respondents and non-respondents, any relationship to the factors of interest in the present project is simply implausible. Another possibility is that nonrespondents might have perceived it as undesirable to run the risk of revealing their views to the

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Government; and while that risk was known to the investigators to be nonexistent, it may have produced nonresponse. For this reason it may not be implausible to believe that nonrespondents would have tended — if they had responded — to be more critical of the Government than actual respondents. However, there is also a counterargument: the questionnaire did provide an opportunity to vent frustrations with the procurement process, in a way that might do some good, without the need to confront those in Government with whom they were doing, or hoped to do business, suggesting that nonrespondents may actually have been less critical. (To judge from the unstructured responses, presented in Appendix B, which were, on the whole, quite moderate in both tone and volume, frustration was not an important factor for respondents.)

Our guess is that the principal "reason" for nonresponse was simply inertia — "Why bother!" — or antipathy to questionnaires — "Not another one!"

On the whole, \textit{a priori} considerations do not suggest to us that there are likely to be any substantial biases as between respondents and nonrespondents. Further, such biases as may exist seem more likely to reflect the characteristics of individual decisionmakers than of the organizations they serve. However, even if serious biases do exist, they would not generally imply that our recommendations are in error, but merely that some other matters may deserve more attention. For example, our recommendation on "breakout" is essentially independent of the existence of respondent bias.

1.3 RESPONSE AND NONRESPONSE TO INDIVIDUAL QUESTIONS

It is not, of course, uncommon for respondents to return questionnaires which are incomplete: for one reason or another the respondent fails to answer all of the questions. In principle this introduces just as much possibility of nonresponse bias as the failure to return the questionnaire; and, for some hypothetical circumstances, it might be useful to consider each question from this standpoint. For example, if questions are asked about the use of drugs, or the nature of one's sexual activities, and the answers are omitted by a substantial proportion of respondents to the questionnaire, one may have good reason to suspect that the data will not represent even the questionnaire respondents very well. For the questionnaires used in the present project, however, it is difficult to conceive of bias as a significant factor associated with failure to answer specific questions, at least as a rule.

By way of illustration we point out that more respondents provided answers to the question about number of employees than to the question about dollar volume of receipts. What significance should be attached to this difference? In actual fact we did not use the receipts data for any analytical (as opposed to descriptive) purpose, so the question is relevant only for illustrative purposes. It is quite possible, for example, that small firms are different from large ones, in terms of their propensity to supply information about the two indicators of size; but while this is a possibility there seems to be no particular reason to expect it, or even to suggest the direction of the possible bias.

Nonetheless, even if there is no serious reason for concern about the possible bias associated with nonresponse to particular questions, there may
be reason, in principle, for concern about the statistical adequacy of the response to individual questions: the fact that 280 usable questionnaires were available tells us only that this is the maximum number of responses to any one question. We could, it seems, deal with this matter simply by presenting detailed data on responses, but this would imply a very large increase in the amount of raw data presented. At first it may appear that we need only tabulate the number of responses to each question, but there are a number of reasons why this would be misleading or inadequate. First, assessing the significance of the number of responses to a question may require us to know how many respondents there should have been to that particular question, among the 280 "respondents": it would have made no sense, for instance, to ask those who said they had not been aware of a particular solicitation whether it was obtained soon enough to respond, so the number of responses to the latter question "should" have been less than 280. Perhaps we could deal with this problem, then, by presenting, for each question, both the actual number of respondents and the number there should have been if recipients had followed instructions precisely. However, if the logic of the instructions demands that there be the same number of responses to two questions, say, but the numbers are in fact different, there is no way for us to know which number "should" have answered — and both may represent a failure on the part of some respondents to follow instructions. There is no simple presentation of response data that would permit the reader to judge whether nonresponse to particular questions should be of concern.

Moreover, to the extent that our interest is in the statistical relationship between variables A and B, say, we need to know not the actual and/or potential number of responses to the two corresponding questions, but the number of respondents who answered both questions: it would be possible for the data to show that 100 firms provided data on variable A, 100 on variable B, with no firm providing data on both A and B. Once again the solution could be simply to present data on the number of respondents to both A and B; but this implies that data should be presented on all possible pairs of variables. Nor are analytical interests confined to relationships involving only two variables, so that, as a matter of principle, we would need to present data on the number of responses taking variables three at a time, four at a time, and so on.

Finally, to the extent that our interest in the numbers of responses to particular questions is based on a concern for whether "statistical significance" should be attached to findings, it seems clearly better to present data on statistical significance as such, rather than to present raw data which would need to be assessed or manipulated by the reader. Accordingly, we do not present response data for individual questions, or combinations of questions, but, as appropriate, address the question of statistical significance. However, one exception may be noted: data on the costs of preparing offers (for submission to the Government) were not tabulated because visual examination of the questionnaires received made it apparent that few had chosen to provide the requested information.

2 STATISTICAL ANALYSIS OF SURVEY RESPONSES

The central issue in the analysis of survey responses was how to determine what factors played a substantial role in respondent participation, especially in the bidding phase. To be sure we also had a concern about the
pre-bid phase (for example, to establish whether or not there was a serious problem relating to non-receipt of solicitation documents), but this part of the effort was more descriptive than analytical, and need not concern us here: relevant statistical tabulation is presented later in this appendix. Here we briefly consider the efforts that were made — beyond tabulation of responses — to identify the critical factors in bidding. Two types of statistical analysis were conducted, which we discuss in turn.

2.1 TESTS OF SIGNIFICANCE

If a given factor identified in the questionnaire, such as the adequacy of the time available for bid preparation, really influences bidding behavior, we should find that the opinions of bidders and nonbidders, respectively, (as to the adequacy of the time available), differ from each other; and the same is, of course, true for any other factor. However, an observed difference may well be due to chance, or to unidentified influential factors operating simultaneously, so it is necessary to adopt some systematic procedure that will help discriminate between those differences we should treat as significant and those which we should ignore. Basically that procedure consists of the repeated application of a test of the hypothesis that any observed difference between bidders and non-bidders is attributable to chance. If the observations are consistent with this hypothesis for a given factor, then we ought — for purposes of this study — to accept the proposition that we need not concern ourselves further with that factor (although we may be wrong); while if the observations are inconsistent with the hypothesis, we accept the possibility that the factor is truly influential and the need to look more closely at it.

Accordingly, for each factor appearing on the questionnaire that might plausibly affect bidding behavior, the responses of bidders and nonbidders, respectively were compared. If the probability that the observed difference in response could have occurred by chance was calculated to be less than .05, the difference was accepted as "significant," while if the probability was calculated to be less than .10, but greater than or equal to .05, the factor was treated as being worthy of some further attention. It may be noted that the probability calculations take account of the actual numbers of responses to each question, so that, even if the number of responses were very low in some cases, no factor could be identified as significant for that reason (unless there were also a nonresponse bias).

The statistical tests just discussed were also routinely applied to determine whether there were significant differences between agencies, when responses were classified by the agency from which the case in question had been selected. There were two reasons for conducting tests of interagency differences. First, if factors affecting participation differed from agency to agency, both policy recommendations and future research methodology would be importantly affected. Second, knowledge of the significance of interagency differences would help throw light on how seriously to treat observed differences between bidders and nonbidders, since the latter might appear to be only marginally significant if it were applicable in, say, only two of the three agencies.

Finally, the same tests of significance were employed to determine whether response was influenced by respondent "size", or by "years in operation".
For purposes of applying these tests respondents were categorized not merely as being "small" or "large", but were assigned to one of four "employment size" categories, as shown in the tables which follow. Similarly, five categories were used for "years in operation".

It may be observed that it would, perhaps, have been more satisfying, given the sponsorship of the study, if the factors differentiating bidders and nonbidders were also factors that differentiated large and small respondents. In general, however, this did not occur.

2.2 REGRESSION ANALYSES

The second type of statistical analysis that was undertaken consisted of efforts to construct formal, multivariate regression models that sought to account for bidding behavior on the selected procurements. The SPSS stepwise regression program was used for this purpose.

To apply the program each variable was assigned a value of +1 or 0, if it could take on two possible values; while in instances where there were three possible answers to a question (as in "encourage", "discourage" and "no influence") the values +1, -1, and 0 were used. "Size" of respondent was indicated by an integer from 1 to 4, inclusive, and "years in operation" by an integer from 1 to 5.

Several different "runs" were undertaken to explain or predict bid/no-bid behavior. In one group of runs all regressions were based on use of all 280 responses, at least in principle, but the various runs differed from each other in terms of the variables that were permitted to enter the regression. More specifically, we may identify the following:

- Run #1: Only the variables representing Part I, Question 9, Items A through N, of the questionnaire were permitted to enter as "causal" factors, except for "size" and "years in operation" which were permitted to enter in this, and all other, runs.
- Run #2: Only the variables representing Part I, Question 10, Items A through P were permitted to enter.
- Run #3: Any variable permitted to enter in Run #1 or Run #2 could enter in this run.
- Run #4: Only the variables representing Part II, Question 2, Items A through Q of the questionnaire were permitted to enter.
- Run #5: Only the variables representing Part II, Question 6, Items A through T were permitted to enter.
- Run #6: Any variable permitted to enter in Run #4 or Run #5 could enter in this run.

Three other groups of runs were also carried out, each corresponding
to use of a different portion of the sample, namely, that representing a single agency. Each such group consisted of 6 runs that could be defined in terms similar to those used above for the sample as a whole.

While we believe that the effort to construct regression models added little to the insights obtainable from study of the application of simple tests of statistical significance, it may be useful to summarize our findings and judgments. It may be noted initially that the criterion for permitting a variable to enter a regression equation was that its coefficient must have a confidence level of 0.95 associated with it, based on use of the statistic F. The numerical results, based on the sample as a whole, were as follows:

- Run #1: The variables 9D, 9E and 9K entered, with an R value of 0.42.
- Run #2: No variables entered at the required confidence level.
- Run #3: No variables entered at the required confidence level. Since this run permitted any of the variables of Run #1 to enter, the fact that the values of the F-statistic fell requires an explanation. We were using a version of the SPSS program in which the correlation matrix was based on the smallest number of observations for any of the variables permitted to enter. Since few people responded to the question in 10G relating to "other" (set-aside requirements), the result was that the level of confidence, in the coefficients of 9D and 9E, dropped when 10G was permitted to enter. The same phenomenon may also account for the result obtained with Run #2. Had funds been available it would have been desirable to repeat the analysis after eliminating the "other" set-aside variable.
- Run #4: The variables 2D and 2F entered.
- Run #5: The variable 6K entered.
- Run #6: The variables 2D, 6K and 2F entered.

When these runs were repeated, using data only for Agency 1 (for which we had the largest number of observations), the results were:

- Run #1: The variables 9K, "size of firm", and 9E entered.
- Run #2: Only the variable 10P entered.
- Run #3: Only the variable 10P entered.
- Run #4: The variables 2D, "size of firm", and 2B entered.
- Run #5: Only the variable "size of firm" entered.
- Run #6: The variables 2D and "size of firm" entered.

Although regressions were, as stated above, developed for each of the other agencies, smaller sample sizes caused a number of special problems to
emerge and increased the ambiguities of interpretation: hence we do not present these results. They do not, in any event, provide any particular insights, except that the seemingly more important factors are usually not the same as for Agency 1. This is, of course, implied by the results presented above, in that Agency 1 results are clearly different from those for the sample as a whole.

Some comments and judgements about these results may be in order. First, if we had not employed such a high confidence level many other variables would have entered the regressions, but since we wanted to focus on the more important factors, a high confidence level seemed appropriate.

Second, when a variable entered a regression it was not always with the anticipated sign, at least for runs based on Part II of the questionnaire. For example, in the run for which the variable 2F entered, it did so with a positive sign, whereas 2D entered with a negative sign; yet it was the nature of Part II, Question 2, that all variables which did enter should have had the same sign. (Correlation between "independent" variables would, of course, account for some such results.)

Third, it is our judgement that statistical analysis of respondents' assessments of the truth or falsity of a series of statements about a solicitation (as in Part I, Question 9 of the questionnaire) provide more reliable clues as to actual bidding behavior of respondents — and therefore, perhaps, more insight into the factors influencing general participation in the bidding phase — than do respondents' own identification of the factors affecting their participation (as in Part I, Question 10 of the questionnaire).

Fourth, the results strongly confirm that there are, indeed, important differences between agencies, at least in terms of the behavior and beliefs of the respondents who deal with them.

Fifth, the regression results tend to confirm the central significance, in accounting for participation in the bidding phase, of the potential bidder's beliefs about his ability to meet Government specifications, as well as his confidence in the Government's technical assessment of his offer.

3 NUMERICAL RESULTS

This section is principally addressed to the presentation of data derived from survey responses, as well as to the statistical significance of that information. It is organized in three subsections, of which the first addresses the "objective" characterization of respondents; that is, the information to be displayed does not depend on either the cases studied or the opinions of the respondents. The next subsection presents data relating to the specific procurements selected for study, while the final subsection relates to respondent participation in Government procurement in general.

3.1 OBJECTIVE CHARACTERISTICS OF RESPONDENTS

Data on type of organizational respondent, on respondent size (as
measured by dollars of annual receipts and average annual employment level, respectively), and on "years in operation" are presented in Tables 1-4. Tables 5 and 6, respectively, present abbreviated breakdowns, by agency, of the data appearing in Tables 3 and 4.

The differences between agencies are highly significant in a statistical sense. On the other hand, cross-tabulations of size and years in operation, respectively, with the bid/no-bid status of the respondent show nothing that is statistically significant, and are not displayed.
### TABLE 1: TYPES OF ORGANIZATIONS RESPONDING TO QUESTIONNAIRE (BASED ON QUESTIONNAIRE, PART III, QUESTION 2)

<table>
<thead>
<tr>
<th>TYPE OF ORGANIZATION</th>
<th>NUMBER OF RESPONDENTS</th>
<th>ABSOLUTE PERCENTAGE</th>
<th>ADJUSTED PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit-making corporation</td>
<td>210</td>
<td>75</td>
<td>80</td>
</tr>
<tr>
<td>Subsidiary or division of profit-making corporation</td>
<td>40</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Other profit-making entity</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Non-profit organization</td>
<td>8</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Failed to answer</td>
<td>16</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
TABLE 2: SIZE OF RESPONDING ORGANIZATIONS, CLASSIFIED BY ANNUAL RECEIPTS
(BASED ON RESPONSES TO QUESTIONNAIRE, PART III, QUESTION 5)

<table>
<thead>
<tr>
<th>ANNUAL RECEIPTS (THOUSANDS OF DOLLARS)</th>
<th>NUMBER OF RESPONDENTS</th>
<th>ABSOLUTE PERCENTAGE</th>
<th>ADJUSTED PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 99</td>
<td>8</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>100 - 499</td>
<td>32</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>500 - 999</td>
<td>19</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>1,000 - 9,999</td>
<td>92</td>
<td>33</td>
<td>42</td>
</tr>
<tr>
<td>10,000 - 99,999</td>
<td>46</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>100,000 - 999,999</td>
<td>15</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>1,000,000 or over</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Failed to answer</td>
<td>63</td>
<td>23</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
TABLE 3: SIZE OF RESPONDING ORGANIZATIONS, CLASSIFIED BY AVERAGE ANNUAL EMPLOYMENT LEVEL (BASED ON RESPONSES TO QUESTIONNAIRE, PART III, QUESTION 6)

<table>
<thead>
<tr>
<th>AVERAGE ANNUAL EMPLOYMENT*</th>
<th>NUMBER OF RESPONDENTS</th>
<th>ABSOLUTE PERCENTAGE</th>
<th>ADJUSTED PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 4</td>
<td>12</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5 - 9</td>
<td>25</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>10 - 19</td>
<td>28</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>20 - 49</td>
<td>51</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>50 - 99</td>
<td>29</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>100 - 499</td>
<td>55</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>500 - 999</td>
<td>11</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1,000 - 9,999</td>
<td>27</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>10,000 or over</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Failed to answer</td>
<td>36</td>
<td>13</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*For analytical purposes these categories were reduced to four: 0-19, 20-99, 100-499, 500 or over, representing, respectively, 26%, 33%, 23% and 18% of the respondents.
TABLE 4: NUMBER OF YEARS IN OPERATION OF RESPONDING ORGANIZATIONS (BASED ON QUESTIONNAIRE, PART III, QUESTION 3)

<table>
<thead>
<tr>
<th>YEARS IN OPERATION*</th>
<th>NUMBER OF RESPONDENTS</th>
<th>ABSOLUTE PERCENTAGE</th>
<th>ADJUSTED PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 2</td>
<td>13</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>3 - 4</td>
<td>28</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>5 - 9</td>
<td>39</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>10 - 24</td>
<td>90</td>
<td>32</td>
<td>34</td>
</tr>
<tr>
<td>25 - 49</td>
<td>40</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>50 - 99</td>
<td>42</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>100 or over</td>
<td>13</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Failed to respond</td>
<td>15</td>
<td>5</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>280</strong></td>
<td><strong>100</strong></td>
<td><strong>101</strong></td>
</tr>
</tbody>
</table>

*For analytical purposes these categories were reduced to five: 1-4, 5-9, 10-24, 25-49, 50 or over, representing, respectively, 16%, 15%, 34%, 15% and 21% of the respondents. The heavy concentration in the interval 10-24 suggests that, in future studies, a further breakdown should be used in this interval.
TABLE 5: SIZE OF RESPONDING ORGANIZATIONS, BY AGENCY

<table>
<thead>
<tr>
<th>AVERAGE ANNUAL EMPLOYMENT</th>
<th>PERCENT OF RESPONDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL</td>
</tr>
<tr>
<td>0 - 19</td>
<td>26</td>
</tr>
<tr>
<td>20 - 99</td>
<td>33</td>
</tr>
<tr>
<td>100 - 499</td>
<td>23</td>
</tr>
<tr>
<td>500 or over</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>
TABLE 6: NUMBER OF YEARS IN OPERATION OF RESPONDING ORGANIZATIONS, BY AGENCY

<table>
<thead>
<tr>
<th>YEARS IN OPERATION</th>
<th>PERCENT OF RESPONDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL</td>
</tr>
<tr>
<td>1 - 4</td>
<td>16</td>
</tr>
<tr>
<td>5 - 9</td>
<td>15</td>
</tr>
<tr>
<td>10 - 24</td>
<td>34</td>
</tr>
<tr>
<td>25 - 49</td>
<td>15</td>
</tr>
<tr>
<td>50 or over</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
</tr>
</tbody>
</table>
3.2 RESPONSES RELATING TO THE SELECTED CASES

In this subsection we summarize responses derived from Part I of the questionnaire. The subsection addresses the "interest" of respondents in one of the selected cases, their "assessments" of the characteristics of the corresponding solicitations, their views on the factors affecting their bid/no-bid decision on the selected cases, and "other" responses relating to the selected solicitations.

3.2.1 INTEREST IN THE SELECTED SOLICITATION

Tabulation of responses shows the following:

- 36% were bidders on the specific solicitation identified in the recipient's questionnaire, while 64% were nonbidders. (Here, as elsewhere, we present rounded data, as appropriate, in the interests of simplicity and minimizing spurious ideas about the accuracy of the estimates. The last percentage cited, for example, is shown in our computer run as 64.3% rather than 64%, the difference being equivalent to something less than 1 response.)

- 85% of respondents said they would have been interested in seeing the selected solicitation if they had been aware of it; 15% said they would not have been interested. (Here, as elsewhere, we present, when it will not mislead, percentages that ignore nonresponse. In the present case approximately 4% of the questionnaires contained no response — consisting, we estimate, of 3% to whom the question was "not applicable, because they had been asked a different question, and 1% who should have answered the question but failed to do so.)

- 74% of respondents said they were "aware" that the solicitation had been issued, 15% said they were "not aware", and 11% were uncertain.

In response to the question "How did your organization become aware that a solicitation had been issued? (Check more than one if appropriate.)", those who were "aware" answered as follows: Commerce Business Daily — 41%; Bidders' mailing list — 51%; PASS — 1 respondent out of 200 applicable; Personal contact (employee) — 13%; Washington area rep. — 7%; Other — 4%. When broken down by agency, for the three principal sources of awareness, we find the following percentages:

<table>
<thead>
<tr>
<th></th>
<th>Agency 1</th>
<th>Agency 2</th>
<th>Agency 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commerce Business daily</td>
<td>16</td>
<td>68</td>
<td>66</td>
</tr>
<tr>
<td>Bidders mailing list</td>
<td>81</td>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td>Personal contact</td>
<td>6</td>
<td>17</td>
<td>23</td>
</tr>
</tbody>
</table>

Analysis of the same data also shows that 81% of respondents checked only one source; 13% checked two sources; 6% (including the respondent who checked PASS) checked three sources or more.

The question which read, "Did your organization request a copy of this particular solicitation?" was answered, by those who were aware of it,
as follows: 73% "yes"; 25% "no"; 3% "don't know". The same group, when asked "Did you actually obtain a copy of this solicitation?" responded 94% "yes", 3% "no", 2% "don't know".

Did recipients of the solicitation obtain it soon enough to respond? 89% said "yes", 9% "no", 2% "don't know". Was the solicitation available at the time of responding to the questionnaire? 78% responded affirmatively, 22% negatively. Of solicitation recipients, 97% said it was of sufficient interest to read, while 3% said it was not.

By cross-tabulation of responses it was shown that:

1. 12% of those with positive "interest" in the solicitation were "not aware" of it.

2. 77% of those who obtained a copy of the solicitation said they had tried to obtain it, while 98% of those who tried actually obtained it.

3. 8% of those who were aware of the solicitation through the Commerce Business Daily said they had not received the solicitation.

4. Among those who did not bid, 76% expressed interest in the solicitation.

There were statistically significant differences between agencies, at confidence levels in excess of 95%, in terms of interest in the solicitation; awareness of the solicitation; and source of awareness of the solicitation. (As an illustration of the last, 59% of the respondents representing one agency checked Commerce Business Daily as a source, while only 11% from another agency did so.) Other inter-agency differences are shown in Table 7, but there were no significant differences between them in terms of seeking to obtain the solicitation, actually obtaining the solicitation, or timely receipt of the solicitation.

5. Of those who bid 98% said they received the solicitation in a timely fashion, while only 80% of the nonbidders said so — a difference that is significant at the 99.9% confidence level.
## Table 7: Relation Between (A) Interest in, and Awareness of the Solicitation, and (B) Interest in and Receipt of the Solicitation, by Agency

<table>
<thead>
<tr>
<th></th>
<th>Agency 1</th>
<th>Agency 2</th>
<th>Agency 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Interest and Awareness</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Percentage of Those With Interest in the Solicitation Who Were Aware of it</td>
<td>82</td>
<td>93</td>
<td>64</td>
</tr>
<tr>
<td>2. Percentage of Those Without Interest in the Solicitation Who Were Aware of it</td>
<td>30</td>
<td>33</td>
<td>60</td>
</tr>
<tr>
<td><strong>B. Interest and Solicitation Receipt</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Percentage of Those With Awareness of, and Interest in, the Solicitation, Who Received it</td>
<td>98</td>
<td>95</td>
<td>97</td>
</tr>
<tr>
<td>2. Percentage of Those With Awareness of, but no Interest in, the Solicitation Who Received it</td>
<td>78</td>
<td>50</td>
<td>33</td>
</tr>
</tbody>
</table>
3.2.2 ASSESSMENTS OF THE SOLICITATION

Everyone who said he had read the solicitation referred to in his questionnaire was asked a series of questions about it. The results are displayed in Table 8. Table 9 shows a breakdown of the same data by agency. Of the 14 characteristics listed in these tables, the differences between agencies are statistically significant at the 99% level in 7, and at the 90% level in an additional 5. (Only Items C and I do not appear to differ significantly between agencies.)

Table 10 shows a breakdown of the same responses by "bidder" and "nonbidder", respectively. At extremely high confidence levels the differences in responses to items D, E and F are significant. Also significant (at the 95% confidence level) were the differences in responses to items K, C and B.

The same responses have been tabulated by size of firm, although not displayed here; and, at the 95% confidence level, the differences are significant for only one item, namely, item G: large firms were more likely to say they could identify their important competitors. When the data are classified by years in operation, the same factor shows up as significant: older firms were more likely to say they could identify competitors. In addition, however, two other items had responses that were significantly related to years in operation (at the 95% level), namely, items K and I. In general, young firms were less likely to have confidence in the technical assessment of their offers, and less likely to say they could predict the "product/service aspects of competitive offers".
### TABLE B: SOLICITATION CHARACTERISTICS (BASED ON QUESTIONNAIRE, PART I, QUESTION 9)

<table>
<thead>
<tr>
<th>THE STATEMENT IN THE QUESTIONNAIRE</th>
<th>Percent of Respondents Who Checked</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>True</td>
</tr>
<tr>
<td>A. The product/service and delivery specifications were clear and consistent.</td>
<td>85</td>
</tr>
<tr>
<td>B. Other requirements (such as subcontracting, &quot;disputes&quot; clause) were clear and consistent.</td>
<td>82</td>
</tr>
<tr>
<td>C. Time available for submission of offers was adequate.</td>
<td>80</td>
</tr>
<tr>
<td>D. We could meet all required product/service specifications.</td>
<td>66</td>
</tr>
<tr>
<td>E. We could meet all required delivery date(s).</td>
<td>88</td>
</tr>
<tr>
<td>F. We could meet all other requirements (such as size standards, financial responsibility, experience).</td>
<td>88</td>
</tr>
<tr>
<td>G. We could identify the probable (important) offerors</td>
<td>70</td>
</tr>
<tr>
<td>H. We could make good predictions of prices in competitive offers.</td>
<td>53</td>
</tr>
<tr>
<td>I. We could make good predictions of product/service aspects of competitive offers.</td>
<td>60</td>
</tr>
<tr>
<td>J. We could confidently predict successful offeror.</td>
<td>31</td>
</tr>
<tr>
<td>K. We had confidence that technical assessment of offers would be adequate.</td>
<td>61</td>
</tr>
<tr>
<td>L. We had confidence that cost assessment of offers would be adequate.</td>
<td>65</td>
</tr>
<tr>
<td>M. We had confidence that award would be based entirely on stated criteria.</td>
<td>61</td>
</tr>
<tr>
<td>N. We believed that award would be made within the time specified in the solicitation.</td>
<td>57</td>
</tr>
</tbody>
</table>
### TABLE 9: SOLICITATION CHARACTERISTICS, BY AGENCY (BASED ON QUESTIONNAIRE, PART I, QUESTION 9)

<table>
<thead>
<tr>
<th>THE STATEMENT IN THE QUESTIONNAIRE</th>
<th>Percent of Respondents Who Checked &quot;True&quot;*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agency 1</td>
</tr>
<tr>
<td>A. The product/service and delivery specifications were clear and consistent.</td>
<td>88</td>
</tr>
<tr>
<td>B. Other requirements (such as subcontracting, &quot;disputes&quot; clause) were clear and consistent.</td>
<td>72</td>
</tr>
<tr>
<td>C. Time available for submission of offers was adequate.</td>
<td>82</td>
</tr>
<tr>
<td>D. We could meet all required product/service specifications.</td>
<td>69</td>
</tr>
<tr>
<td>E. We could meet all required delivery date(s)</td>
<td>94</td>
</tr>
<tr>
<td>F. We could meet all other requirements (such as size standards, financial responsibility, experience).</td>
<td>92</td>
</tr>
<tr>
<td>G. We could identify the probable (important) offerors</td>
<td>82</td>
</tr>
<tr>
<td>H. We could make good predictions of prices in competitive offers.</td>
<td>49</td>
</tr>
<tr>
<td>I. We could make good predictions of product/service aspects of competitive offers.</td>
<td>63</td>
</tr>
<tr>
<td>J. We could confidently predict successful offeror.</td>
<td>41</td>
</tr>
<tr>
<td>K. We had confidence that technical assessment of offers would be adequate.</td>
<td>73</td>
</tr>
<tr>
<td>L. We had confidence that cost assessment of offers would be adequate.</td>
<td>78</td>
</tr>
<tr>
<td>M. We had confidence that award would be based entirely on stated criteria.</td>
<td>78</td>
</tr>
<tr>
<td>N. We believed that award would be made within the time specified in the solicitation.</td>
<td>66</td>
</tr>
</tbody>
</table>

*Percentages who checked "false" are given by 100% minus the numbers shown, since only the respondents are counted. Only those who had read the solicitation (174) were called upon to answer, and there was little non-response by individual item.

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### TABLE 10: SOLICITATION CHARACTERISTICS BY BID STATUS (BASED ON QUESTIONNAIRE, PART I, QUESTION 9)

<table>
<thead>
<tr>
<th>THE STATEMENT IN THE QUESTIONNAIRE</th>
<th>Percent of Respondents Who Checked &quot;True&quot;*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bidders</td>
</tr>
<tr>
<td>A. The product/service and delivery specifications were clear and consistent.</td>
<td>82</td>
</tr>
<tr>
<td>B. Other requirements (such as subcontracting, &quot;disputes&quot; clause) were clear and consistent.</td>
<td>76</td>
</tr>
<tr>
<td>C. Time available for submission of offers was adequate.</td>
<td>86</td>
</tr>
<tr>
<td>D. We could meet all required product/service specifications.</td>
<td>80</td>
</tr>
<tr>
<td>E. We could meet all required delivery date(s).</td>
<td>97</td>
</tr>
<tr>
<td>F. We could meet all other requirements (such as size standards, financial responsibility, experience).</td>
<td>94</td>
</tr>
<tr>
<td>G. We could identify the probable (important) offerors.</td>
<td>68</td>
</tr>
<tr>
<td>H. We could make good predictions of prices in competitive offers.</td>
<td>46</td>
</tr>
<tr>
<td>I. We could make good predictions of product/service aspects of competitive offers.</td>
<td>61</td>
</tr>
<tr>
<td>J. We could confidently predict successful offeror.</td>
<td>28</td>
</tr>
<tr>
<td>K. We had confidence that technical assessment of offers would be adequate.</td>
<td>69</td>
</tr>
<tr>
<td>L. We had confidence that cost assessment of offers would be adequate.</td>
<td>65</td>
</tr>
<tr>
<td>M. We had confidence that award would be based entirely on stated criteria.</td>
<td>61</td>
</tr>
<tr>
<td>N. We believed that award would be made within the time specified in the solicitation.</td>
<td>54</td>
</tr>
</tbody>
</table>

*See Footnote, Table 9.
3.2.3 RESPONDENT ASSESSMENTS OF INFLUENTIAL FACTORS

In Part I, Question 10 of the questionnaire respondents were asked directly to assess each of 16 factors, in terms of its influence on their bidding behavior in the selected case. The results are shown in Table 11.

In an effort to gain insight into the meaning of the results displayed in Table 11, the same responses were cross-classified with the respondent's bid/no-bid status. At the 99% confidence level one factor differentiates bidders from non-bidders, namely, item N: 51% of the bidders and only 24% of the non-bidders were encouraged by this factor. At the 95% confidence level two additional factors differentiate bidders from non-bidders, namely, items O and A. Finally, at the 90% confidence level, we see significant differences in responses to items L, C, J, K and D.

An analysis was also undertaken to determine to what extent there might be significant interagency differences in these responses. At the 99% confidence level there were significant interagency differences in responses to items K, C, L, N and D. At the 95% level two additional factors can be identified: H and I. At the 90% level item P is also significant.

Analysis of these responses by size of firm reveals that only one factor is significant at the 99% level: item G(1). One additional factor — item P — comes into play at the 90% level: business conditions are considered to be an influential factor in bidding behavior by a far higher percentage of large businesses than small ones.

Analysis of responses in terms of the age of the firm yields the rather surprising result that younger firms (under 25 years old) are much more likely to say that they are encouraged by a small business set-aside than are older firms — a result that is significant at the 99% confidence level. At the 95% confidence level, it appears that older firms are more likely to be discouraged by the costs of bidding (item K), and encouraged by anticipated business conditions (item P). Finally, the time available for bid preparation (item J) is significant at the 90% level: the data indicate that this is a much more discouraging factor for young firms than older ones.

3.2.4 OTHER FACTORS RELATING TO SELECTED SOLICITATIONS

Respondents were asked to identify "other factors" tending to encourage/discourage bidding, as well as "principal factors" in the bid/no-bid decision. These are listed in Appendix C, to the extent that they may tend to supplement the items in Tables 8-11.

Respondents were asked to estimate the direct costs of making offers under the selected solicitations, but non-response to this question was so high that we did not tabulate the results. It was clear that the range of bidding costs was very broad, although most of the responses actually obtained showed very low costs (such as $20!), and related to formally advertised procurements. However, a few respondents noted direct costs over $10,000.

Three respondents said their offers were disqualified.
<table>
<thead>
<tr>
<th>FEATURE IDENTIFIED IN QUESTIONNAIRE</th>
<th>Percent of Respondents Who Said They Were Encouraged</th>
<th>Discouraged</th>
<th>Not Influenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The grouping of goods/services for award purposes</td>
<td>47</td>
<td>17</td>
<td>36</td>
</tr>
<tr>
<td>B. The probable size of the award (dollars)</td>
<td>60</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>C. The number of units required</td>
<td>50</td>
<td>8</td>
<td>42</td>
</tr>
<tr>
<td>D. Contract pricing (fixed price, cost-type, labor-hour, incentives, etc.)</td>
<td>29</td>
<td>25</td>
<td>46</td>
</tr>
<tr>
<td>E. Type of competition (formally advertised, competitive price negotiation, competitive technical negotiation, multiple award, etc.)</td>
<td>39</td>
<td>12</td>
<td>49</td>
</tr>
<tr>
<td>F. Type of award (definite or indefinite quantity, multi-year, task order, etc.)</td>
<td>44</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td>G. Set-aside requirements (if any): (1) Small business</td>
<td>52</td>
<td>11</td>
<td>37</td>
</tr>
<tr>
<td>(2) Labor surplus area</td>
<td>10</td>
<td>17</td>
<td>73</td>
</tr>
<tr>
<td>H. Criteria of evaluation of competing offers</td>
<td>30</td>
<td>22</td>
<td>48</td>
</tr>
<tr>
<td>I. Other terms of the solicitation (subcontracting plan, defective pricing, etc.)</td>
<td>8</td>
<td>17</td>
<td>75</td>
</tr>
<tr>
<td>J. Time available for bid preparation</td>
<td>26</td>
<td>28</td>
<td>46</td>
</tr>
<tr>
<td>K. Costs of preparing bid.</td>
<td>10</td>
<td>39</td>
<td>51</td>
</tr>
<tr>
<td>L. Number and/or identity of expected competitors</td>
<td>9</td>
<td>35</td>
<td>56</td>
</tr>
<tr>
<td>M. Terms of anticipated competitive bids.</td>
<td>10</td>
<td>15</td>
<td>75</td>
</tr>
<tr>
<td>N. Success (awards) rate experienced in prior offers of this type.</td>
<td>39</td>
<td>37</td>
<td>24</td>
</tr>
<tr>
<td>O. Success (awards) rate experienced in all prior offers as a group.</td>
<td>42</td>
<td>26</td>
<td>32</td>
</tr>
<tr>
<td>P. Anticipated business conditions.</td>
<td>44</td>
<td>18</td>
<td>38</td>
</tr>
</tbody>
</table>
3.3 RESPONSES RELATING TO PROCUREMENT IN GENERAL

In this subsection we summarize responses derived from Part II of the questionnaire. The subsection addresses the quantification of respondent experience with Government, the factors they report as limiting their direct participation in the bidding phase, their preferences with respect to various aspects of procurement, their sources of information, their view on the factors limiting subcontracting, their beliefs about the procurement process, and "other" responses relating to procurement in general.

3.3.1 QUANTIFICATION OF GOVERNMENT PROCUREMENT EXPERIENCE

Tables 12-20 summarize and present the responses that bear on the exposure of respondents to solicitation and award processes. These tables are self-explanatory.

The data displayed in Tables 13-20 have been cross-tabulated and analyzed in a variety of ways. The highlights of these analyses are as follows:

- The differences between agencies are highly significant in a statistical sense, for all of the variables in these tables except "unsolicited offers". To illustrate: we may characterize Agency 1 respondents as obtaining — compared to other agency respondents — a small number of solicitations, submitting a small number of offers, obtaining a low dollar volume of awards and subcontracts, submitting a high ratio of offers to solicitations, and obtaining awards that are individually of low value.

- When analyzed by respondent size the differences between the various groups are statistically significant for all of the tabulated variables being discussed here, except for "unsolicited offers" and the "ratio of offers to solicitations".

- When analyzed by the respondent's "years in operation" the differences between groups are not significant for any variable except "number of awards", "dollar volume of awards" and "dollar volume of subcontracts".

- There are no statistically significant differences between bidders and non-bidders, with respect to the variables in these tables.
### TABLE 12: RESPONDENT EXPOSURE TO GOVERNMENT PROCUREMENT (BASED ON QUESTIONNAIRE, PART II, QUESTION 1)

<table>
<thead>
<tr>
<th>EXPERIENCE WITH</th>
<th>NUMBER OF RESPONDENTS</th>
<th>PERCENT OF RESPONSES TO SPECIFIC QUESTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>A. Federal solicitations</td>
<td>270</td>
<td>5</td>
</tr>
<tr>
<td>B. Submission of offers to Federal government</td>
<td>271</td>
<td>5</td>
</tr>
<tr>
<td>C. Submission of offers to prime Federal contractors</td>
<td>154</td>
<td>72</td>
</tr>
<tr>
<td>D. Obtaining awards from Government or prime contractors</td>
<td>215</td>
<td>17</td>
</tr>
</tbody>
</table>

**COOPER AND COMPANY**
### TABLE 13: DISTRIBUTION OF FEDERAL SOLICITATIONS OBTAINED (BASED ON QUESTIONNAIRE, PART II, QUESTION 11.A)

<table>
<thead>
<tr>
<th>Number of Federal Solicitations Obtained in Past 12 Months</th>
<th>Observed Frequency</th>
<th>Adjusted Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>1 - 2</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td>3 - 5</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>6 - 10</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>11 - 25</td>
<td>43</td>
<td>17</td>
</tr>
<tr>
<td>26 - 50</td>
<td>51</td>
<td>20</td>
</tr>
<tr>
<td>51 - 100</td>
<td>29</td>
<td>11</td>
</tr>
<tr>
<td>101 - 250</td>
<td>28</td>
<td>11</td>
</tr>
<tr>
<td>251 - 1,000</td>
<td>31</td>
<td>12</td>
</tr>
<tr>
<td>Over 1,000</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>No answer</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>101</td>
</tr>
</tbody>
</table>
TABLE 14: DISTRIBUTION OF OFFERS IN RESPONSE TO FEDERAL SOLICITATIONS (BASED ON QUESTIONNAIRE, PART II, QUESTION 11.B)

<table>
<thead>
<tr>
<th>NUMBER OF OFFERS IN RESPONSE TO FEDERAL SOLICITATIONS IN PAST 12 MONTHS</th>
<th>OBSERVED FREQUENCY</th>
<th>ADJUSTED PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>1 - 2</td>
<td>26</td>
<td>10</td>
</tr>
<tr>
<td>3 - 5</td>
<td>31</td>
<td>12</td>
</tr>
<tr>
<td>6 - 10</td>
<td>44</td>
<td>17</td>
</tr>
<tr>
<td>11 - 25</td>
<td>61</td>
<td>24</td>
</tr>
<tr>
<td>26 - 50</td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td>51 - 100</td>
<td>26</td>
<td>10</td>
</tr>
<tr>
<td>101 - 250</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>251 - 1,000</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>over 1,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>27</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>99</td>
</tr>
</tbody>
</table>
### TABLE 15: DISTRIBUTION OF UNSOLICITED OFFERS TO FEDERAL GOVERNMENT
(BASED ON QUESTIONNAIRE, PART II, QUESTION 11.C)

<table>
<thead>
<tr>
<th>NUMBER OF UNSOLICITED OFFERS IN PAST 12 MONTHS</th>
<th>OBSERVED FREQUENCY</th>
<th>ADJUSTED PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>109</td>
<td>47</td>
</tr>
<tr>
<td>1 - 2</td>
<td>40</td>
<td>17</td>
</tr>
<tr>
<td>3 - 5</td>
<td>24</td>
<td>10</td>
</tr>
<tr>
<td>6 - 10</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>11 - 15</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>16 - 20</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>21 - 25</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>26 - 30</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>31 - 50</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>over 50</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>No answer</td>
<td>50</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>280</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
TABLE 16: DISTRIBUTION OF FEDERAL AWARDS, BY NUMBER OF AWARDS (BASED ON QUESTIONNAIRE, PART II, QUESTION 11.D)

<table>
<thead>
<tr>
<th>NUMBER OF FEDERAL AWARDS IN PAST 12 MONTHS</th>
<th>OBSERVED FREQUENCY</th>
<th>ADJUSTED PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>1 - 2</td>
<td>60</td>
<td>24</td>
</tr>
<tr>
<td>3 - 5</td>
<td>48</td>
<td>19</td>
</tr>
<tr>
<td>6 - 10</td>
<td>34</td>
<td>13</td>
</tr>
<tr>
<td>11 - 25</td>
<td>37</td>
<td>15</td>
</tr>
<tr>
<td>26 - 50</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>51 - 100</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>101 - 250</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>251 - 500</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>over 500</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>No answer</td>
<td>27</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>100</td>
</tr>
</tbody>
</table>
TABLE 17: DISTRIBUTION OF FEDERAL AWARDS, BY DOLLAR VOLUME OF AWARDS (BASED ON QUESTIONNAIRE, PART II, QUESTION 11.E)

<table>
<thead>
<tr>
<th>THOUSANDS OF DOLLARS OF FEDERAL AWARDS IN PAST 12 MONTHS</th>
<th>OBSERVED FREQUENCY</th>
<th>ADJUSTED PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>29</td>
<td>12</td>
</tr>
<tr>
<td>1 - 9</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>10 - 24</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>25 - 49</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>50 - 99</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>100 - 249</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>250 - 499</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>500 - 999</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td>1,000 - 9,999</td>
<td>72</td>
<td>31</td>
</tr>
<tr>
<td>10,000 and over</td>
<td>27</td>
<td>11</td>
</tr>
<tr>
<td>No answer</td>
<td>44</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>280</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
TABLE 18: DISTRIBUTION OF SUBCONTRACTS OBTAINED, BY DOLLAR VOLUME OF SUBCONTRACTS (BASED ON QUESTIONNAIRE, PART II, QUESTION 11.F)

<table>
<thead>
<tr>
<th>Thousands of Dollars of Federal Subcontracts Obtained in Past 12 Months</th>
<th>Observed Frequency</th>
<th>Adjusted Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>128</td>
<td>62</td>
</tr>
<tr>
<td>1 - 9</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>10 - 99</td>
<td>23</td>
<td>11</td>
</tr>
<tr>
<td>100 - 999</td>
<td>31</td>
<td>15</td>
</tr>
<tr>
<td>1,000 and over</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>No answer</td>
<td>72</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>101</td>
</tr>
</tbody>
</table>
### TABLE 19: DISTRIBUTION OF OFFERS MADE, AS PERCENTAGE OF SOLICITATIONS OBTAINED

<table>
<thead>
<tr>
<th>NUMBER OF OFFERS MADE AS PERCENTAGE OF NUMBER OF SOLICITATIONS OBTAINED</th>
<th>OBSERVED FREQUENCY</th>
<th>ADJUSTED PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 10</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>11 - 20</td>
<td>41</td>
<td>19</td>
</tr>
<tr>
<td>21 - 30</td>
<td>32</td>
<td>14</td>
</tr>
<tr>
<td>31 - 40</td>
<td>29</td>
<td>13</td>
</tr>
<tr>
<td>41 - 50</td>
<td>30</td>
<td>14</td>
</tr>
<tr>
<td>50 - 100</td>
<td>72</td>
<td>33</td>
</tr>
<tr>
<td>No answer</td>
<td>59</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>280</strong></td>
<td><strong>101</strong></td>
</tr>
</tbody>
</table>
TABLE 20: DISTRIBUTION OF MEAN DOLLAR VALUE OF FEDERAL AWARDS OBTAINED

<table>
<thead>
<tr>
<th>THOUSANDS OF DOLLARS PER AWARD</th>
<th>OBSERVED FREQUENCY</th>
<th>ADJUSTED PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 10</td>
<td>35</td>
<td>17</td>
</tr>
<tr>
<td>11 - 25</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>26 - 50</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>51 - 100</td>
<td>31</td>
<td>15</td>
</tr>
<tr>
<td>101 - 500</td>
<td>73</td>
<td>36</td>
</tr>
<tr>
<td>501 - 1,000</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>over 1,000</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>No answer</td>
<td>78</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>99</td>
</tr>
</tbody>
</table>
3.3.2 FACTORS SAID TO LIMIT DIRECT PARTICIPATION

Whether or not respondents had any knowledge of the specific cases selected for study, they were called upon to specify the factors they deemed important in limiting their "direct participation in Government solicitation/award processes". Table 21 shows the responses to the 17 yes/no questions listed in Part II, Question 2 of the questionnaire. Additional factors identified by respondents are listed in Appendix C, to the extent that they are of interest.

Table 22 presents a breakdown of the same data by agency; and when statistical tests are applied, we find that:

- There are statistically significant differences, at the 99.99% level of confidence, for items D, M, and N.
- For items A, C, I and K, the differences are significant at the 99% confidence level.
- At the 95% confidence level, the differences between agencies are significant for items F, H, and L.
- Items J, P and Q show significantly different responses for the three agencies, at the 90% confidence level.

Despite these interagency differences, when the data are analyzed to determine whether bidders and nonbidders respond differently, only one item, D, was significant statistically at the 99% (or higher) level, and one item, F, at the 90% level.

Analysis of the same responses in terms of respondent size may be summarized as follows. At the 95% confidence level, item J is seen as an important limiting factor by a higher proportion of small firms (especially those in the 100-499 category). At the same confidence level, analysis shows that many more small firms than large ones view item Q as an important limiting factor. A similar result holds for item K, although at a 90% confidence level.

These responses were also analyzed by the respondent's "years of operation". There were no statistically significant differences, except for the following. First, at the 99.99% level, the longer a firm has been in operation, the less likely it is to see item N as an important limiting factor. Second, at the 95% level, four additional factors — A, B, F and K — come into play: for any one of them the probability that it will be seen as limiting participation declines with years in operation.
<table>
<thead>
<tr>
<th>IMPORTANT FACTORS LIMITING PARTICIPATION</th>
<th>Percent of Respondents Who Said</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Cost of marketing or of obtaining adequate information about the market.</td>
<td>50 50</td>
</tr>
<tr>
<td>B. Deficiencies of solicitation documents.</td>
<td>41 59</td>
</tr>
<tr>
<td>C. Unnecessarily restrictive product/service specifications.</td>
<td>51 49</td>
</tr>
<tr>
<td>D. Costs of preparing offers.</td>
<td>51 49</td>
</tr>
<tr>
<td>E. Inadequate safeguards for proprietary information.</td>
<td>20 80</td>
</tr>
<tr>
<td>F. Inadequate or unfair Government assessment of offers.</td>
<td>46 54</td>
</tr>
<tr>
<td>G. Too many additional restrictions on operations.</td>
<td>23 77</td>
</tr>
<tr>
<td>H. Risks associated with acceptance of a Government contract.</td>
<td>32 68</td>
</tr>
<tr>
<td>I. Inadequate profit on Government business.</td>
<td>52 48</td>
</tr>
<tr>
<td>J. Danger of dependence on Government.</td>
<td>22 78</td>
</tr>
<tr>
<td>K. Too much competition.</td>
<td>25 75</td>
</tr>
<tr>
<td>L. Procedures for establishing allowability of costs.</td>
<td>35 65</td>
</tr>
<tr>
<td>M. Procedures for establishing acceptability of product/service.</td>
<td>31 69</td>
</tr>
<tr>
<td>N. Some organizations have an &quot;inside track&quot;.</td>
<td>62 38</td>
</tr>
<tr>
<td>O. Obtaining Government awards requires special skills.</td>
<td>38 62</td>
</tr>
<tr>
<td>P. Obtaining substantial Government business requires dishonesty.</td>
<td>3 97</td>
</tr>
<tr>
<td>Q. Obtaining Government business involves too much diversion of executive attention from other markets.</td>
<td>30 70</td>
</tr>
</tbody>
</table>
### TABLE 22: FACTORS LIMITING PARTICIPATION IN GOVERNMENT PROCUREMENT IN GENERAL, BY AGENCY (BASED ON QUESTIONNAIRE PART II, QUESTION 2)

<table>
<thead>
<tr>
<th>IMPORTANT FACTORS LIMITING PARTICIPATION</th>
<th>Percent of Respondents Who Said &quot;Yes&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agency 1</td>
</tr>
<tr>
<td>A. Cost of marketing or of obtaining adequate information about the market.</td>
<td>40</td>
</tr>
<tr>
<td>B. Deficiencies of solicitation documents.</td>
<td>39</td>
</tr>
<tr>
<td>C. Unnecessarily restrictive product/service specifications.</td>
<td>58</td>
</tr>
<tr>
<td>D. Costs of preparing offers.</td>
<td>34</td>
</tr>
<tr>
<td>E. Inadequate safeguards for proprietary information.</td>
<td>19</td>
</tr>
<tr>
<td>F. Inadequate or unfair Government assessment of offers</td>
<td>36</td>
</tr>
<tr>
<td>G. Too many additional restrictions on operations</td>
<td>27</td>
</tr>
<tr>
<td>H. Risks associated with acceptance of a Government contract.</td>
<td>40</td>
</tr>
<tr>
<td>I. Inadequate profit on Government business.</td>
<td>62</td>
</tr>
<tr>
<td>J. Danger of dependence on Government.</td>
<td>18</td>
</tr>
<tr>
<td>K. Too much competition.</td>
<td>16</td>
</tr>
<tr>
<td>L. Procedures for establishing allowability of costs.</td>
<td>36</td>
</tr>
<tr>
<td>M. Procedures for establishing acceptability of product/service.</td>
<td>49</td>
</tr>
<tr>
<td>N. Some organizations have an &quot;inside track&quot;.</td>
<td>40</td>
</tr>
<tr>
<td>O. Obtaining Government awards requires special skill.</td>
<td>43</td>
</tr>
<tr>
<td>P. Obtaining substantial Government business requires dishonesty.</td>
<td>2</td>
</tr>
<tr>
<td>Q. Obtaining Government business involves too much diversion of executive attention from other markets.</td>
<td>32</td>
</tr>
</tbody>
</table>
3.3.3 GENERAL PROCUREMENT PREFERENCES

All respondents were asked to indicate whether they would prefer to have the Government make more or less use of various procurement features or types, for some 20 features listed in Part II, Question 6 of the questionnaire. Responses are shown as Table 23, with an agency breakdown in Table 24.

There are, unquestionably, statistically significant differences by agency:

- At the 99.99% confidence level the differences are significant for items G, I and L.
- At the 99% confidence level the differences are significant for items C, E, J and K.
- At the 90% confidence level the differences are significant for items A, H, N and Q.

When these responses are analyzed by size of firm some significant differences emerge, at least at the 90% confidence level. Responses for the items in question are presented as Table 25.

Analysis of the data when classified by "years in operation" also reveals statistically significant differences, at the 90% confidence level, for the items displayed in Table 26.

Is there a relationship between bidding behavior and the expressed preferences of respondents? Some statistically significant differences do emerge (at the 95% confidence level): for items E and L it appears that bidders were more likely than nonbidders to favor "more use", while for items H and K bidders were more likely to favor "less use".
<table>
<thead>
<tr>
<th>PROCUREMENT FEATURE</th>
<th>Percent of Respondents Favoring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>More Use</td>
</tr>
<tr>
<td>A. Sole source procurement</td>
<td>40</td>
</tr>
<tr>
<td>B. Fixed-price contracting</td>
<td>37</td>
</tr>
<tr>
<td>C. Cost-type contracting</td>
<td>31</td>
</tr>
<tr>
<td>D. Incentive contracting</td>
<td>55</td>
</tr>
<tr>
<td>E. Local procurement from a Federal schedule</td>
<td>43</td>
</tr>
<tr>
<td>F. Multiple award schedules</td>
<td>61</td>
</tr>
<tr>
<td>G. Follow-on awards</td>
<td>61</td>
</tr>
<tr>
<td>H. Option items in awards</td>
<td>58</td>
</tr>
<tr>
<td>I. Multi-year awards</td>
<td>61</td>
</tr>
<tr>
<td>J. Definite quantity awards</td>
<td>55</td>
</tr>
<tr>
<td>K. Basic ordering agreements</td>
<td>52</td>
</tr>
<tr>
<td>L. Commercial (as opposed to Federal) specifications</td>
<td>68</td>
</tr>
<tr>
<td>M. System (as opposed to subsystem/equipment) awards</td>
<td>28</td>
</tr>
<tr>
<td>N. Small business set-asides</td>
<td>59</td>
</tr>
<tr>
<td>O. Formally advertised (non-negotiated) awards</td>
<td>41</td>
</tr>
<tr>
<td>P. Arbitrary limitation on number of offers solicited</td>
<td>20</td>
</tr>
<tr>
<td>Q. Prequalification of products</td>
<td>49</td>
</tr>
<tr>
<td>R. Prequalification of offerors</td>
<td>60</td>
</tr>
<tr>
<td>S. Bidders' conferences</td>
<td>52</td>
</tr>
<tr>
<td>T. Commerce Business Daily</td>
<td>50</td>
</tr>
</tbody>
</table>
### TABLE 24: PROCUREMENT PREFERENCES OF RESPONDENTS BY AGENCY (BASED ON QUESTIONNAIRE PART II, QUESTION 6)

<table>
<thead>
<tr>
<th>PROCUREMENT FEATURE</th>
<th>Percent of Respondents Favoring More Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agency 1</td>
</tr>
<tr>
<td>A. Sole source procurement</td>
<td>31</td>
</tr>
<tr>
<td>B. Fixed-price contracting</td>
<td>34</td>
</tr>
<tr>
<td>C. Cost-type contracting</td>
<td>17</td>
</tr>
<tr>
<td>D. Incentive contracting</td>
<td>46</td>
</tr>
<tr>
<td>E. Local procurement from a Federal schedule</td>
<td>57</td>
</tr>
<tr>
<td>F. Multiple award schedules</td>
<td>60</td>
</tr>
<tr>
<td>G. Follow-on awards</td>
<td>45</td>
</tr>
<tr>
<td>H. Option items in awards</td>
<td>51</td>
</tr>
<tr>
<td>I. Multi-year awards</td>
<td>40</td>
</tr>
<tr>
<td>J. Definite quantity awards</td>
<td>68</td>
</tr>
<tr>
<td>K. Basic ordering agreements</td>
<td>55</td>
</tr>
<tr>
<td>L. Commercial (as opposed to Federal) specifications</td>
<td>90</td>
</tr>
<tr>
<td>M. System (as opposed to subsystem/equipment) awards</td>
<td>29</td>
</tr>
<tr>
<td>N. Small business set-asides</td>
<td>63</td>
</tr>
<tr>
<td>O. Formally advertised (non-negotiated) awards</td>
<td>50</td>
</tr>
<tr>
<td>P. Arbitrary limitation on number of offers solicited</td>
<td>15</td>
</tr>
<tr>
<td>Q. Prequalification of products</td>
<td>53</td>
</tr>
<tr>
<td>R. Prequalification of offerors</td>
<td>54</td>
</tr>
<tr>
<td>S. Bidders' conferences</td>
<td>53</td>
</tr>
<tr>
<td>T. Commerce Business Daily</td>
<td>41</td>
</tr>
</tbody>
</table>
TABLE 25: PROCUREMENT PREFERENCES OF RESPONDENTS FOR SELECTED FEATURES,* BY SIZE OF FIRM

<table>
<thead>
<tr>
<th>PROCUREMENT FEATURE</th>
<th>PREFERENCE</th>
<th>PERCENT BY EMPLOYMENT CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0-19</td>
</tr>
<tr>
<td>A. SOLE SOURCE PROCUREMENT</td>
<td>More</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Less</td>
<td>57</td>
</tr>
<tr>
<td>B. FIXED PRICE CONTRACTING</td>
<td>More</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Less</td>
<td>51</td>
</tr>
<tr>
<td>E. LOCAL PROCUREMENT (SCHEDULE)</td>
<td>More</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Less</td>
<td>21</td>
</tr>
<tr>
<td>I. MULTI-YEAR AWARDS</td>
<td>More</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Less</td>
<td>33</td>
</tr>
<tr>
<td>N. SMALL BUSINESS SET-ASIDES</td>
<td>More</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>Less</td>
<td>5</td>
</tr>
<tr>
<td>S. BIDDERS' CONFERENCES</td>
<td>More</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Less</td>
<td>18</td>
</tr>
<tr>
<td>T. COMMERCE BUSINESS DAILY</td>
<td>More</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Less</td>
<td>5</td>
</tr>
</tbody>
</table>

*Features shown are those for which differences by size of firms are statistically significant at the 90% or higher level of confidence.
## Table 26: Procurement Preferences of Respondents for Selected Features,*
### By Years in Operation

<table>
<thead>
<tr>
<th>PROCUREMENT FEATURE</th>
<th>PREFERENCE</th>
<th>PERCENT BY YEARS OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1-4</td>
</tr>
<tr>
<td>I. MULTI-YEAR AWARDS</td>
<td>More</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Less</td>
<td>39</td>
</tr>
<tr>
<td>L. COMMERCIAL SPECIFICATIONS</td>
<td>More</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>Less</td>
<td>6</td>
</tr>
<tr>
<td>N. SMALL BUSINESS SET-ASIDES</td>
<td>More</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>Less</td>
<td>11</td>
</tr>
<tr>
<td>S. BIDDERS' CONFERENCES</td>
<td>More</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Less</td>
<td>32</td>
</tr>
</tbody>
</table>

*Features shown are those for which differences by "years in operation" are statistically significant at the 90% level of confidence.
3.3.4 SOURCES OF INFORMATION

All respondents were asked to specify "the source(s) of information you have principally relied on to obtain timely information about the Federal contracting and subcontracting opportunities of interest to you". Since there was little response in terms of subcontracting, the data to be presented will refer to contracting only. Note that respondents were asked to indicate the use of multiple sources as appropriate.

Table 27 shows the numbers of respondents who checked the various sources identified in the questionnaire, as well as the percentages of respondents, by agency, who checked these sources. It is quite clear that the tendency to use multiple sources of information differs greatly by agency.

When the same responses are analyzed by the bid/no-bid status of the respondent, little of interest emerges, except that (1) none of those who checked PASS were among the bidders (a statistically significant result), and (2) a significantly higher percentage of bidders than of nonbidders checked "Washington area rep".

The same data have been analyzed in terms of the respondent's "years in operation". The proportion of respondents who checked Commerce Business Daily fell as "years in operation" rose, while older firms tend to make more use of bidders' mailing lists and Washington area reps than younger firms. In terms of "size of firm" we find that large firms had checked Commerce Business Daily more frequently than small ones, and that the use of personal contacts rises with firm size. These findings, pertaining to firm size and age, are significant at the 95% confidence level.

Finally, we have analyzed these data against respondents' interest in, and awareness of, the solicitations selected for study (as shown in their responses to Part I, Questions 1 and 2, of the questionnaire). However, the differences fall short of statistical significance.
TABLE 27: RELIANCE ON VARIOUS INFORMATION SOURCES: TOTAL NUMBERS AND PERCENTAGE BREAKDOWN BY AGENCY (BASED ON RESPONSES TO QUESTIONNAIRE, PART II, QUESTION 8)

<table>
<thead>
<tr>
<th>INFORMATION SOURCE</th>
<th>TOTAL NUMBER WHO CHECKED</th>
<th>Agency 1</th>
<th>Agency 2</th>
<th>Agency 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commerce Business Daily</td>
<td>153</td>
<td>32</td>
<td>73</td>
<td>85</td>
</tr>
<tr>
<td>Bidders' mailing lists</td>
<td>163</td>
<td>74</td>
<td>37</td>
<td>48</td>
</tr>
<tr>
<td>PASS</td>
<td>13</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Personal contacts (employees)</td>
<td>138</td>
<td>29</td>
<td>60</td>
<td>82</td>
</tr>
<tr>
<td>Washington area rep.</td>
<td>46</td>
<td>18</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Number of items per respondent</td>
<td>1.85</td>
<td>1.59</td>
<td>1.86</td>
<td>2.42</td>
</tr>
</tbody>
</table>
3.3.5 FACTORS LIMITING SUBCONTRACTING

All respondents were asked to identify "important factors" that tend "to limit subcontracting in connection with Federal procurement", and the results are tabulated in Table 28. A breakdown by agency is also shown therein.

When the responses are analyzed we find the following:

. Interagency differences are significant (at the 95% level) only for items A and B.

. There are no significant differences by respondent "size", except with respect to item G: the larger the firm the more likely it was to identify item G as a factor limiting subcontracting.

. For 5 of the 7 factors listed in this question there are statistically significant differences in responses, when the data are analyzed in terms of "years in operation". For items C and F, respectively, the older the firm the less likely it was to say that the factor was limiting, while for item G the more likely it was to identify the factor as limiting subcontractor participation. For items A and B, respectively, firms that are of intermediate age (5-24 years) appear different from those which are either younger or older: intermediate age firms were more likely to say that item A was limiting, but less likely to say that item B was limiting.

It had been our initial intent to follow up with (send questionnaires to) actual and potential subcontractors identified by respondents, with the thought that they might have better or more reliable insights into factors limiting subcontracting. However, three considerations combined to reduce the possible value of such an effort. First, few respondents identified their subcontractors, partially because actual subcontracts had been few. Secondly, those who did provide names tended to do so very late in the project, when it was really too late for follow-up. Thirdly, and perhaps most importantly, we became very doubtful about the payoff, since we came to believe that, by and large, prime contractors and subcontractors are the same people — with respect to different procurements; and, since almost all of our respondents could be viewed as actual or potential subcontractors, their responses were as valid as those of the group initially contemplated. As a result, no separate group of "subcontractors" was surveyed.
TABLE 28: RESPONDENT OPINIONS ON FACTORS LIMITING SUBCONTRACTING IN FEDERAL PROCUREMENT (BASED ON QUESTIONNAIRE, PART II, QUESTION 3)

<table>
<thead>
<tr>
<th>Important Factors Limiting Subcontracting</th>
<th>Percent of Respondents Who Said Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>A. Prime contractors do not wish to subcontract</td>
<td>50</td>
</tr>
<tr>
<td>B. Government requirements imposed on subcontractors are too onerous</td>
<td>39</td>
</tr>
<tr>
<td>C. Subcontracting opportunities are too unpredictable</td>
<td>66</td>
</tr>
<tr>
<td>D. Subcontractors must reveal confidential/proprietary information to prime contractors</td>
<td>35</td>
</tr>
<tr>
<td>E. Difficult for prime contractors to identify competent subcontractors</td>
<td>49</td>
</tr>
<tr>
<td>F. Difficult for potential subcontractors to track opportunities and/or market their capabilities</td>
<td>77</td>
</tr>
<tr>
<td>G. Subcontractors with required capabilities often do not exist</td>
<td>30</td>
</tr>
</tbody>
</table>
3.3.6 BELIEFS ABOUT THE PROCUREMENT PROCESS

All respondents were queried about the truth or falsity of a series of procurement-related statements that we thought might be indicative of their attitudes to Government procurement features. The results are presented in Table 29, for the sample as a whole and by agency.

We note, first, that interagency differences in response are statistically significant, at the 95% confidence level, for items C, D, H and I.

Second, when the data are analyzed in terms of the bld/no-bid status of the respondent, we find that a greater proportion of nonbidders than of bidders believe in the truth of item C — a result that is statistically significant at the 95% level.

Third, there are statistically significant findings associated with firm "size", which may be summarized as follows: small firms are more likely to say that items A, E and F are true, while large firms are more likely to say that items D, G and H are true.

Finally, the responses have been analyzed to establish whether "years in operation" appears to have an influence on the views expressed. For items C, E and F, the younger the responding firm the more likely it is to say that the statement is true; while for item D the younger the firm the more likely it is to say that the statement is false. These findings are significant at the 95% level.

3.3.7 OTHER RESPONSE RELATED TO PROCUREMENT IN GENERAL

In Part II of the questionnaire a number of open-ended questions were asked, such as one relating to suggestions for change in Federal procurement policy. These response are presented, on a question-by-question basis, in Appendix C.

COOPER AND COMPANY
<table>
<thead>
<tr>
<th>STATEMENT IN THE QUESTIONNAIRE</th>
<th>Percent of Respondents Who Marked Statement as True</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. There are many substantial awards/solicitations not synopsized in the Commerce Business Daily</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>75</td>
</tr>
<tr>
<td>B. By the time a solicitation synopsized it is usually too late to go after it</td>
<td>79</td>
</tr>
<tr>
<td>C. Many solicitations are only nominally competitive</td>
<td>80</td>
</tr>
<tr>
<td>D. Many procurements that are &quot;small business set-asides&quot; ought not to be</td>
<td>51</td>
</tr>
<tr>
<td>E. Many procurements that ought to be &quot;small business set-asides&quot; are not</td>
<td>68</td>
</tr>
<tr>
<td>F. Government requirements are stated, with unnecessary frequency, in ways that preclude small business participation</td>
<td>58</td>
</tr>
<tr>
<td>G. Assistance to small businesses, in making their capabilities known to the Government, are adequate</td>
<td>39</td>
</tr>
<tr>
<td>H. Pre-award surveys of facilities and financial responsibility are generally fair and adequate</td>
<td>73</td>
</tr>
<tr>
<td>I. The Certificate of Competency program is needed by small business</td>
<td>67</td>
</tr>
</tbody>
</table>
limited competition: a small experiment

Two of the cases selected for study dealt with (new) procurements that had not been synopsized in the Commerce Business Daily, for which no solicitation was generally available, and in which awards were made on the basis of a single offer in each case. Obviously, in such cases, there was no point in seeking responses to the standard Part I of the questionnaire, since we knew the respondents could not provide information about them that had a bearing on the question of why they had or had not bid. (We exclude from consideration here the two firms which obtained the awards in question.) Accordingly, we designed a special Part I for these two cases, which is shown as Figure 4 in Appendix A.

For the two cases we developed a mailing list of only 37 names, from the material we had at hand; that is, we selected names from mailing lists that had been used by the agencies in question in connection with other procurements (and not used by us in connection with other selected cases). For this mailing the response was: 2 undelivered; 1 response saying "we are not a small business"; and 9 completed questionnaires — astonishingly close agreement, percentagewise, with the overall sample, in view of the small size of our special mailing.

Not surprisingly, all 9 respondents said "no" in response to Questions 1, 2 and 3. However, only 7 of the 9 respondents answered negatively to the fourth question; that is, 2 respondents thought their capabilities were such that they should have been invited to submit proposals. Further, in the open-ended part of the response, these 2 firms answered in such a way as to indicate that they had assumed that there had been a solicitation synopsized in the Commerce Business Daily that had been available for the asking. Thus one said that he thought he had simply missed an "opportunity", while the other believed that the synopsis must have been inadequate, causing him not to request it. The sample is too small to have any confidence in the results, of course, but the fact that 2 of the 9 respondents thought they might be capable of meeting the Government's requirements — in situations of deliberately restricted competition — is certainly not grounds for complacency about the Government's procurement practices in this area.

Table 30 shows a count of the 9 responses to each of the 4 parts of Question 5 (Figure 4). How should the Government behave if it believes (as in the two cases under discussion) that it is appropriate to limit competition?
### TABLE 30: RESPONDENT ATTITUDES TO GOVERNMENTAL LIMITATIONS ON PARTICIPATION  
(BASED ON QUESTION 5, FIGURE 4)

<table>
<thead>
<tr>
<th>APPROPRIATE FOR THE GOVERNMENT TO</th>
<th>NUMBER OF RESPONDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>(a) Invite the participation of only those organizations?</td>
<td>3</td>
</tr>
<tr>
<td>(b) Invite participation of many other selected organizations, on the grounds that the Government assessment may be wrong?</td>
<td>5</td>
</tr>
<tr>
<td>(c) Invite anyone to bid?</td>
<td>4</td>
</tr>
<tr>
<td>(d) Inform potential participants of its prior judgments on qualifications?</td>
<td>8</td>
</tr>
</tbody>
</table>