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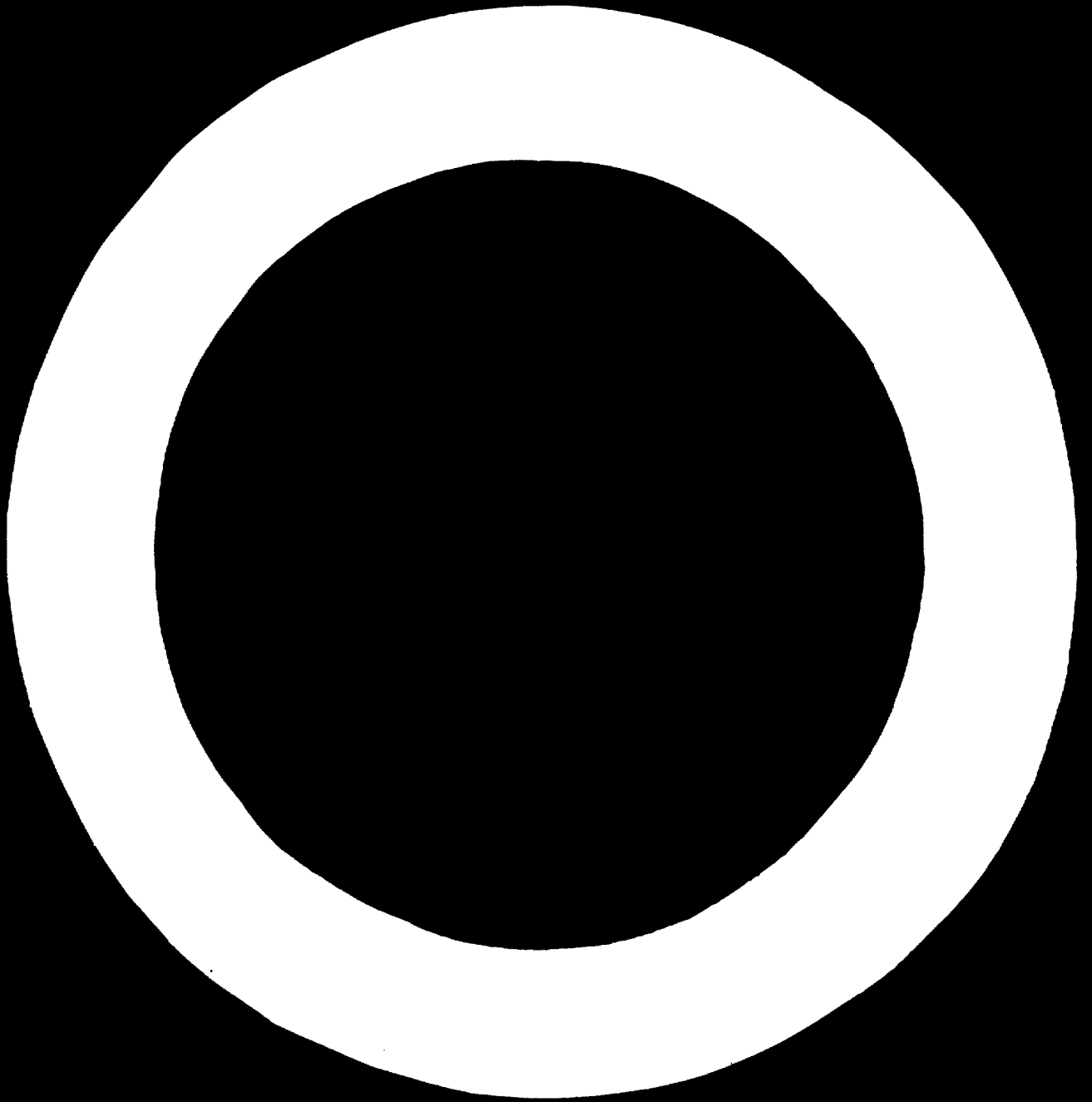
# INDUSTRIALIZATION AND PRODUCTIVITY

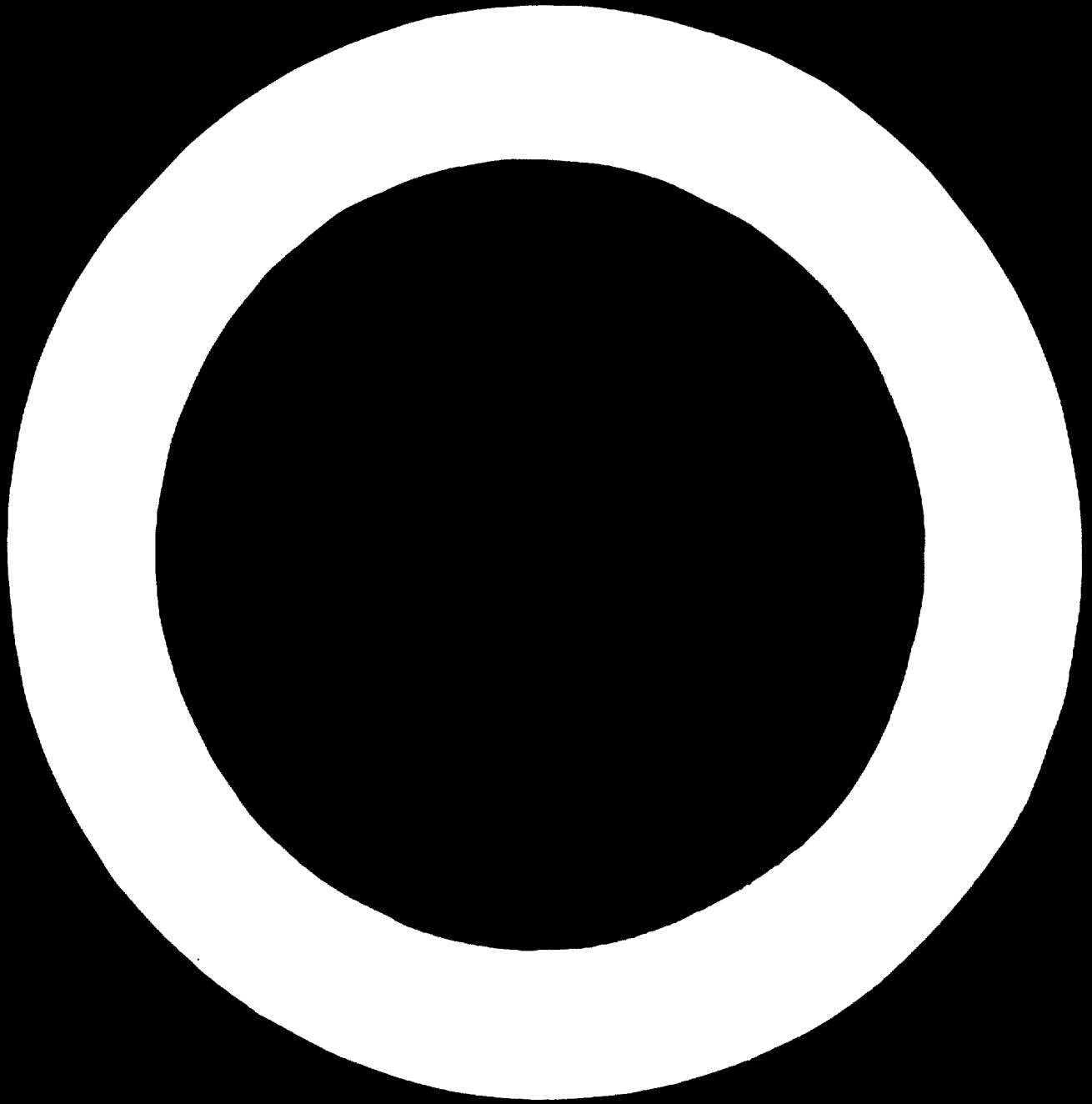


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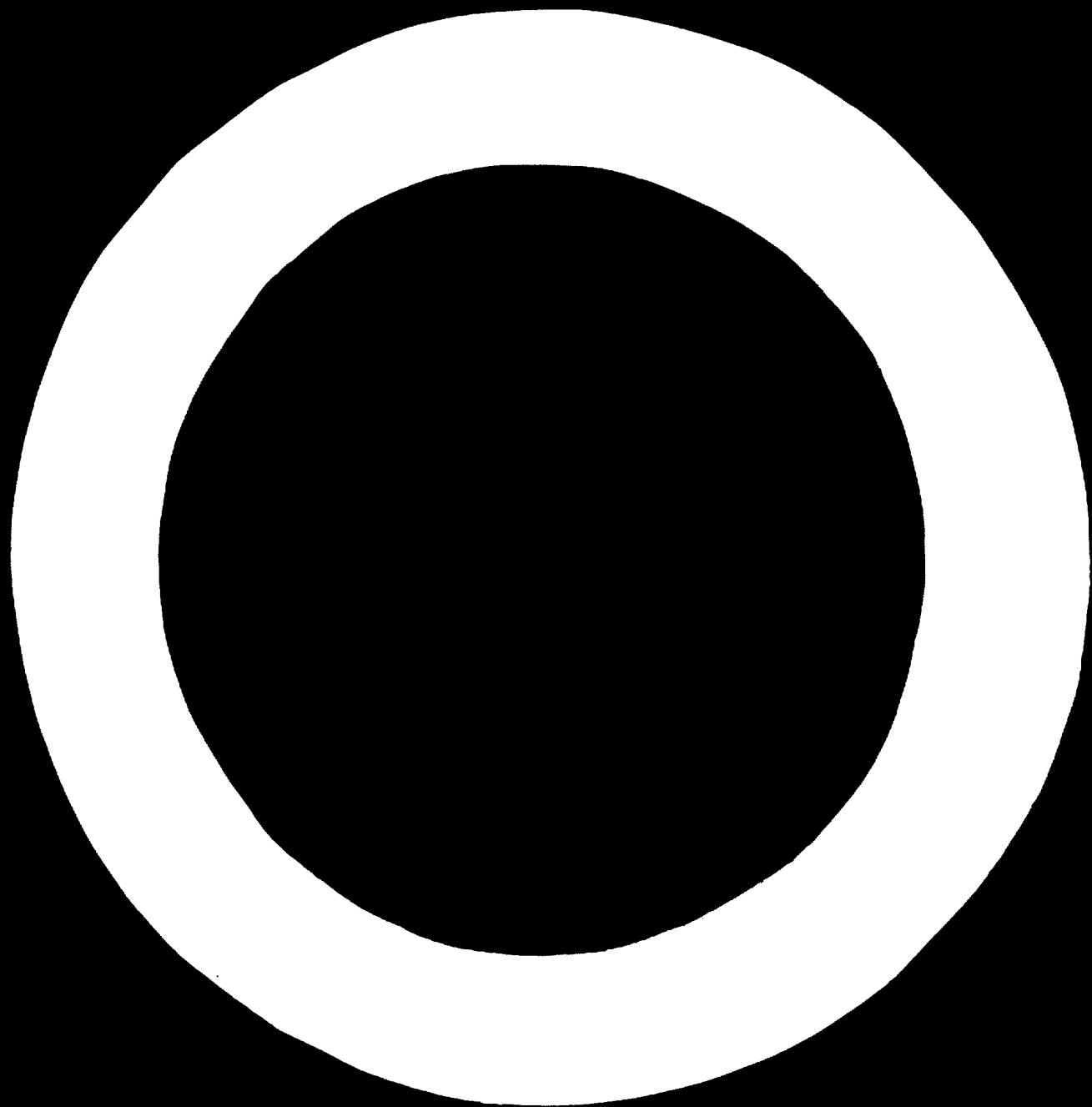
UNITED NATIONS





**INDUSTRIALIZATION  
AND  
PRODUCTIVITY**

**12**



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Cover illustration: Student at the Unesco-assisted Indian Institute of Technology in Powai, India

United Nations Industrial Development Organization



# INDUSTRIALIZATION AND PRODUCTIVITY

BULLETIN 12

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## Preface

**T**HIS ISSUE OF the *Industrialization and Productivity Bulletin* is devoted to selective subjects and research programmes which focus attention on industrial development techniques and methods for accelerating the industrial capacity of the developing countries and on a more intensive utilization of their factor endowments.

The introductory article describes the policies and practices adopted by two countries, India and the United States, to assure the participation of small business in the provision of the Government's procurement needs. The channelling of purchase orders, under specified conditions, to small industries was inaugurated by the United States as a means of maintaining a healthy and soundly established small-business community, whereas the problem in India was to bring about the establishment of such a community. The article concludes with a suggested series of actions that might be considered by developing countries in various stages of economic growth to build up a viable small-business structure, encouraged in part by assuring it a share in the Government's own purchases and procurement needs.

The paper on Decentralization and Project Evaluation under Economies of Scale and Indivisibilities develops a graphical method of analysing a linear programming decomposition model with two connecting resources and two sectors. Such a model can be regarded as a rudimentary representation of a two-level planning system. Fixed costs are included in the diagram in a natural way, thereby relating the graphical analysis to cases with indivisibilities and economies of scale. The optimal solution is bounded by two approximations: one based on selected combinations of the largest indivisibilities, and the other, on average costs assuming the full utilization of key capacities. The planning strategy suggested by the method involves centralized decisions concerning large indivisibilities together with decentralized decisions concerning small indivisibilities. The latter decisions are to be governed by prices that reflect average (not marginal) resource requirements, after the exclusion of all resource needs that have already been covered by centralized, non-price-type, resource allocations.

The study by Professor Zymelman draws attention to a heretofore little used planning tool, namely, international comparisons as a basic method of making manpower projections for industry in the developing countries. The approach of using such manpower projections by the developing countries is based on the hypothesis that a given skill composition reflects a given state of technology and, therefore, productivity, and that quantitative industrial data from other nations can be important guidelines in planning manpower requirements.

Reports on, respectively, Consultative Group Meetings on Industrial Estates and Industrial Areas, a Meeting of Experts on the Role of Advanced Skills and Technologies in Industrial Development, and an Expert Advisory Group Meeting on Industrial Investment Promotion conclude the *Bulletin's* presentation for this issue. The report on Industrial Estates and Industrial Areas presents a summary of discussions and recommendations made by two separate Consultative Group Meetings concerning the opportunities and problems in promoting the establishment and expansion of small-scale industries in their respective areas. The second report relates to the observations and conclusions reached by an expert group on the role of advanced skills and technologies in industrial development. The third and last-named report reviews the expanding efforts being made to increase the volume of industrial project investment and implementation in the developing countries.

Throughout, the *Bulletin* aims to present for the benefit of industrial planning and industrial development technicians engaged in the promotion of industrial development in the developing countries the efforts and results of new research which may have application to the industrialization problems of these countries.

# Promotion of Small-Scale Industries through Government Purchasing

By KENNARD WEDDELL

*THE PROMOTION OF industrial development as a means of increasing economic growth is engaging the attention of the developing countries throughout the world. The objective is one which merits the fullest consideration of the policy makers in these countries, as does the particular role that is played by small-scale industry and the question how to make this role more effective. The following paper by K. Weddell focuses attention on the contribution of small-scale industry when it is encouraged and nourished by the Government within a small-industry programme.*

*To be effective such programmes must be composed of several co-ordinated activities, or subprogrammes, such as courses in business management and market surveys, sales methods, cost accounting, financial assistance (both long-term and short-term), employer technical training, adequate machine tools, and efficiently laid-out plant space for their effective use. Important as these subprogrammes are, they are of little avail to an industrial enterprise unless they relate to the production orders on its books.*

*Self-evident as this fact should be, it is often lost sight of by newly developing nations. This article discusses both United States and Indian governmental activities designed to channel purchase orders to small industries, and shows the accomplishments made to date. In this connexion it should be realized that in the case of the United States the purchase programme was geared to the maintenance of a healthy and long-established small-business community, whereas the problem in India was to bring about the establishment of such a community, with relatively little to build upon other than a fervid determination to succeed.*

## TOP GOVERNMENT SUPPORT: A BASIC REQUIREMENT

**W**HEN A GOVERNMENT decides that it is in the best interest of the nation's economy to establish a programme whereby a fair proportion of governmental purchases will be channelled to small independent enterprises, it must recognize the fact that it will be "stepping on the toes" of its purchasing officials and buyers, interfering with their established ways of doing business, seemingly ignoring their life-long training and, in fact, outraging their historical prerogatives. To have any chance of success, the policy

and the directive to develop an implementing programme must emanate from the Head, or Heads, of Government and, once set in motion, must have their consistent and continual support.

In the United States the first programme to provide assistance to small industries through governmental purchases was established in 1942 by an Act of Congress signed by the President. The programme, though not the policy, was discontinued at the end of World War II by presidential

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*MR. K. WEDDELL has organized procurement assistance activities in the United States and India. Early in World War II, he was in charge of the procurement programme of the Smaller War Plants Corporation of the United States Government; from 1950-1964, he conducted a small-business programme for the Department of the Air Force. In 1956, as a consultant to the Government of India, he contributed to the development of that country's small-industry procurement programme. He is now serving as a consultant to the government of the State of Washington for the development of a state technical services programme co-ordinated with a national programme sponsored by the United States Department of Commerce.*

proclamation, but was re-established in 1951, again by an Act of Congress, and continues to this day. Both Houses of Congress have long maintained Small-Business Committees which carry on continual surveillance of the manner in which the Government's purchasing agencies comply with the programme's requirements.

Immediately after his inauguration, President John F. Kennedy, who as a Senator had served on the Senate Small-Business Committee, showed a strong interest in the programme. Following up a complaint by the Congress on the purchasing policy of the Department of Defense President Kennedy urged his Secretary of Defense in a special memorandum to put greater emphasis on contracting small business.

The Secretary, whose policies controlled the placement of well over two thousand million dollars a year in defence contracts, replied that while a great deal was being accomplished by the Army, Navy and Air Force, he was convinced they could do better, and promised an increase of 10 per cent in awards to small industrial concerns over the amount they had been awarded the previous year. The effect of this evidence of top interest was immediate. The Secretary's pledge, passed on down through the official channels, was kept.

The above incident was an unusual case, and it should not be assumed that a programme will be effective just because it is essentially sound and the top policy makers in the Government are sincere and vocal in their support of it. There are many echelons in the chain of command that runs from a member of the Cabinet down to the individual buyer, and the actions of the latter, after all, are what make or break the programme. Any break in that chain or any lessening in motivation cannot help but bring about a deterioration in the attitude of the lower echelons. The buyer and his companion technicians who evaluate the technical aspects of the tenders received must spend more of their time to make the small-industries programme work; their willingness to make this extra effort is understandably affected by the attitude of their immediate superiors.

In the United States this ever-present danger of a weak link in the chain of command was immediately recognized by the heads of the departments which had procurement authority. Early in 1951, when the small-industry programmes were re-established, these department heads assigned to each echelon a full-time small-business specialist, usually a civilian, to be responsible to the commander of the installation for the proper conduct of the programme, and to serve as the commander's "right arm" in ensuring that

the programme did not lose its force as it was passed on down the line.

Figure 1 shows how this was accomplished in the Air Force which handles by far the largest amount of purchases for the Government.

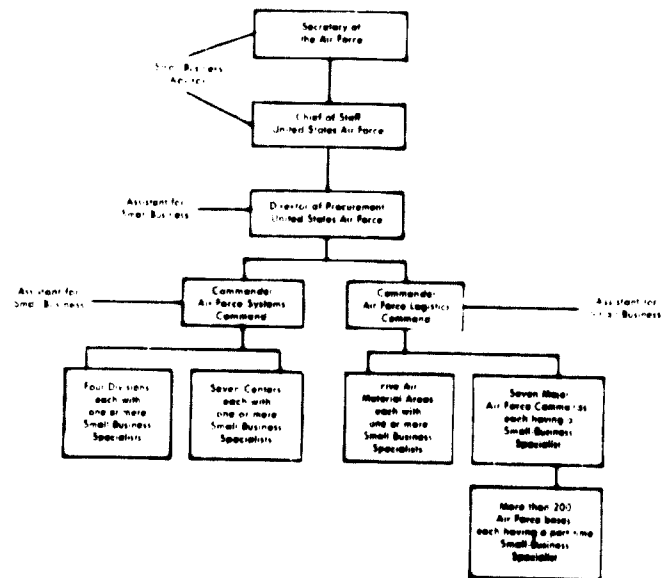


Figure 1

All the above small-business advisors, assistants and specialists are Air Force civilian employees. Those labelled specialists work with the actual buyers and report directly to the Directors of Procurement at their respective installations.

Despite the fact that all government civilian and military agencies with procurement authority assured the Congress that they were willing and prepared to conduct specific programmes to implement the Government's small-enterprise procurement policy, the Congress nevertheless decided that there was a need for an independent governmental agency to make certain that the Congressional mandates were thoroughly observed. To this end it created in July 1951 the Small Defense Plant Administration (SDPA).

Thus since 1951 two distinct small-enterprise procurement programmes have evolved having a common objective while using different methods; one programme is conducted by the procurement agencies themselves, the other by an "outside" agency. At the outset, conflicts were inevitable, but through the years these problems have been overcome and the programme became complementary. The programmes and their results are described below.

## THE FIRST PRIME CONTRACT PROGRAMME IN THE UNITED STATES

**T**HE FIRST PRIME contract programme in the United States was initiated by Congress in the early months of World War II. For the first time the policy was proclaimed that a "fair share" of government purchases should be placed with the smaller enterprises of the nation. It is important to observe that although this policy had a single objective, its purposes were twofold; one economic, the other military.

The economic side was underscored by the fact that, although there was a large and healthy small-business community in the United States before active participation in the war was thrust upon the nation, the sudden and all-embracing requirements for defence production were bound to play havoc with the livelihood of the smaller enterprises. Unable to secure their accustomed raw materials, which were in short supply and allocated mostly to large contractors for defence production, and in no position to retain their skilled artisans who were being recruited for defence production, small businesses were faced with the imminent prospect of having to close down. It is needless to dwell upon the disruption that would have occurred in community life throughout the country and the disastrous results to the national economy. Quick action was needed.

On the military side was the consideration that the small-enterprise community contained a vast reservoir of potential skills and resourcefulness, which—if converted to the production of articles urgently needed in the national defence—could greatly lessen the burden already overwhelming the larger contractors and, it was hoped, reduce over-all costs.

Faced with this situation the Congress passed a small-business act that resulted in the establishment of the Smaller War Plants Corporation (SWPC) as an independent government agency responsible solely to the President and the Congress. It was charged with developing a programme of co-ordination with the procurement officials and buyers of the federal departments, chiefly the military, while leaving procurement authority, with one minor exception, to the departments.

The War Department (now the Army), the Navy Department and the Army Air Corps (now the Air Force) quickly established a group of liaison officers, usually recruited from industry, to smooth the way for the small-business specialists of the SWPC. The latter were also recruited from industry and assigned to work with buyers in the major purchasing offices of the country. Their method of operation was to screen, jointly with procurement officials, all purchase requests before the requests went to the buyers for procurement action, and to select those that appeared to be within the production capabilities of smaller enterprises. The SWPC specialists then secured from the buyers the necessary Requests for Proposals, including applicable specifications and drawings, and sent

them to the SWPC regional offices in those areas where the best potential sources were located.

The regional offices made the proposed procurement information available to interested potential sources within their districts, some one hundred all told, and these potential sources then sent their proposals directly to the buyer. The buyers also sent the Requests for Proposals directly to their own known potential sources, large and small, as no procurements were set aside for exclusive competition among small concerns.

Almost all purchases made by the military departments in World War II were negotiated. Time was essential; ability to furnish the required quality in the shortest possible time came first, and price was a secondary consideration. Widespread competition was desirable, but not at the expense of timely delivery.

It is interesting to note that the Congress was fearful that the smaller enterprises might not be able to produce at as low a cost as the larger concerns, and made a provision in the Act to authorize the payment of a price-differential to smaller concerns when it was in the best interest of the Government. In their procurement regulations the military departments gave authority to their buyers to pay a price-differential of up to 15 per cent whenever, in their judgement, such action was justified. The price-differential was not applied automatically but was left to the discretion of the buyer. A payment of a differential of more than 15 per cent required the approval of higher authority, and there were few instances of this having been done. There are no reliable statistics indicating the extent to which the buyers on their own cognizance paid price-differentials. It is believed to have been an infrequent occurrence; in any event the extra price paid by the Government would have been lost in the huge outlay for military weapons and equipment.

In the search for new small industrial sources, the Army Air Corps Branch of the SWPC made an interesting experiment. It employed a commercial artist who was especially skilled in converting the configuration specifications of a fairly complicated article into a series of isometric drawings, commonly known as three-dimensional drawings, or "cut-aways". These cut-aways were printed and sent out to the district offices of the SWPC prior to, or at the same time as, the mailing of the specifications. Since "a picture is better than a thousand words", the proprietor of a small enterprise could quickly decide whether or not he was interested in the complete set of specifications, which he would of course need in preparing a quotation. These drawings were not a substitute for the specifications themselves, but were useful in arousing interest. In a modified form, and for more simple articles, this device might well be considered by industrially developing nations.

The Small-Business Act of 1942 (Public Law 603 of the 77th Congress) placed final authority in the hands of the

SWPC in two types of situations. One was in the issuance of Certificates of Competency, as to capacity and credit "of any small business concern . . . to perform a specific Government procurement contract", which would override the purchasing agency's finding. This authority was never used by the SWPC.

The other authority gave the SWPC the power to act as a contractor for needed articles and to subcontract their production to firms of its own choosing. The use of this authority was subject to the approval of higher governmental authority and such approval was in all cases granted. About twelve such contracts were taken—some with and some without the acquiescence of the procurement agency—and about half of them proved beneficial to the Government; the others did not, chiefly, it was claimed, due to political intervention.

The Act also urged the SWPC to take such action as it considered appropriate to bring about the letting of subcontracts by large prime contractors on "fair and equitable terms and in the greatest volume practicable". Although occasional and localized efforts were made by the field

offices of the Corporation, the SWPC never set up an active national programme to this end.

Although the Congress in its Act of 1942 prescribed and authorized certain specific preferences (including subsidies) for small business concerns, it never defined the meaning of "small business concerns". Of its own accord, however, the SWPC used as a rule of thumb the definition that a small business concern have less than 500 employees and be independently owned, with the proviso that, in specific cases, this definition could be broadened by action of the SWPC board of directors; such action was taken in a few instances.

The above account of the activities of the Smaller War Plants Corporation in World War II is deemed important to the purposes of this article in that:

It was a pioneering effort operating in uncharted seas, under emergency war-time conditions;

Its "trial and error" experience formed the basis for succeeding programmes of the United States and of India.

Statistical results of the SWPC programme in the military departments are given in the following table.

Table 1  
ARMY, NAVY AND ARMY AIR CORPS CONTRACTS OF OVER \$US10,000<sup>a</sup>  
(1943-1945)

	Number	Percentage	Value (\$)	Percentage
Total .....	1,012,976	—	106,039,940,000	—
Small business awards .....	570,787	57	17,138,646,000	16.2

<sup>a</sup>Statistics on contracts of less than \$10,000 during 1945 were not segregated as between large and small business. Had they been, the percentages awarded small concerns would have been higher.

## DEVELOPMENT OF SMALL-INDUSTRY PROCUREMENT PROGRAMMES, 1951 TO 1965

THE Smaller War Plants Corporation was dissolved by presidential order in December 1946, and no small-industry procurement programme was conducted or even proposed until the early months of 1951. At that time the involvement of the United States in the Korean conflict had reached such proportions that once again American industry had to be reoriented to provide military weapons, equipment and supplies. Again, and for the same reasons as at the beginning of World War II, the position of the small enterprises in the national economy was threatened.

This time, however, there was an important difference in the situation; the government purchasing agencies, particularly those in the newly created Department of Defense, had learned from the World War II experience that small concerns not only had a right to a "place in the sun" but were willing and able to produce needed defence articles and services. The procurement agencies, both military and civilian, had come to the conclusion that an aggressive small-business programme was needed, and that they themselves could conduct such programmes as an integral part of sound procurement more effectively than could be done by an independent executive agency such as the SWPC in World War II.

Early in 1951 a Small-Business Executive Committee was formed, comprised of the top procurement policy officials of the many agencies in Washington, D.C., and chaired by the Administrator of the National Production Authority. The Committee's first task was to have a study made of all purchasing directives and existing practices for the purpose of detecting provisions that might stand in the way of a small business concern's ability to compete for articles and services purchased by the Government. Many such "road-blocks" were found, including:

Scant notice, if any, of proposed procurements;

Too little time allowed for the submission of a well-considered quotation or proposal;

Lack of readily available specifications for a concern which had not previously produced the article;

Specifications drawn up around one company's product, thereby creating a monopoly;

Proposed procurements, which called for such large quantities and set such a short delivery schedule that only very large industrial enterprises could make proposals;

Unreasonable requirements for performance bonds in contracts outside the field of construction.

As these and other obstacles were pin-pointed, the Administrator gave firm instructions to the heads of the procurement agencies that they be removed immediately.

The second task of the Small-Business Executive Committee was to bring about, on the part of each procurement agency, a directed small-business programme (tailored to its own field of procurement) to ensure equitable treatment of small potential bidders and contractors so that there could be no thought of preferential treatment.

The Small-Business Committees of the Senate and the House were kept informed of these developments and early in June 1951 a formal Joint Hearing was held at which the departments and agencies described their planned programmes in some detail. The committees were impressed and a month later the Small-Business Act of 1951 was passed—patterned almost exactly after the earlier Act of 1942—which re-established an independent executive agency, the Small Defense Plants Administration (SDPA), with responsibilities and authority similar to those given the SWPC in World War II. A notable exception was the dropping of the earlier price-differentials authorization; in its place was a provision that a year later became the basis for small-business "set-asides", described later in this article. Thus there evolved, in the United States, two small-business procurement programmes; one conducted by the procurement agencies themselves, designed to provide equitable treatment; the other conducted by the SDPA and concerned solely with preferential treatment of small enterprises. Over the years these two concepts were merged to the mutual benefit of the Government and of the small-business community.

During this period the Congress and the Executive Branch of the Government came to the realization that a small-business programme should not be considered solely as an emergency measure designed to meet the exigencies

of a war-time economy, but should be a continuous endeavour to maintain and strengthen small, independent, industrial enterprises in order that they might make an increasing contribution to the nation's economy. To this end the Small Defense Plants Administration was renamed the Small-Business Administration, made a permanent agency of the Government and given wider scope, while its procurement responsibilities and limited authority remained the same.

In 1954 the Government of India decided that a small-business programme could assist in the economic development of that country. It secured the aid of the Ford Foundation in bringing from the United States a team of government experts, who had been instrumental in setting up the small-business programme, to serve as advisers to the Indian Government in a similar undertaking.

Within the Ministry of Commerce and Industry a Development Commissioner of Small-Scale Industries was appointed and, under the aegis of the Central Government, the National Small Industries Corporation, Ltd., was established. The Commissioner was charged with the development of the programme in all its aspects, including procurement, and the Corporation was made responsible for the conduct of the programme. The Corporation established branches in Bombay, Calcutta and Madras, and drew heavily on the willingly-offered manpower resources of the Directorates of Industry in all the states of India. A small-industries service institute was established in every state and, while they were not part of the Corporation itself, these institutes played an important role in the Corporation's procurement programme. This programme was set in motion in 1957 and although it was "tailored" to meet specific conditions in India, many of its activities were patterned after those which had been tested in the United States.

## METHODS OF CHANNELLING GOVERNMENT PURCHASES TO SMALL CONCERNS

**T**HE FOLLOWING PROCEDURES have been laid down by the procurement officers of the Air Force, the largest purchasing agency by far in the United States, whose purchasing methods as related to small industrial enterprises have established a pattern used by the other military departments; by procurement officers of the General Services Administration (GSA) whose purchases are entirely of non-military items; by the Procurement and Management Assistance Division of the Small-Business Administration (SBA); and, in India, by the Government's National Small Industries Corporation (NSIC).

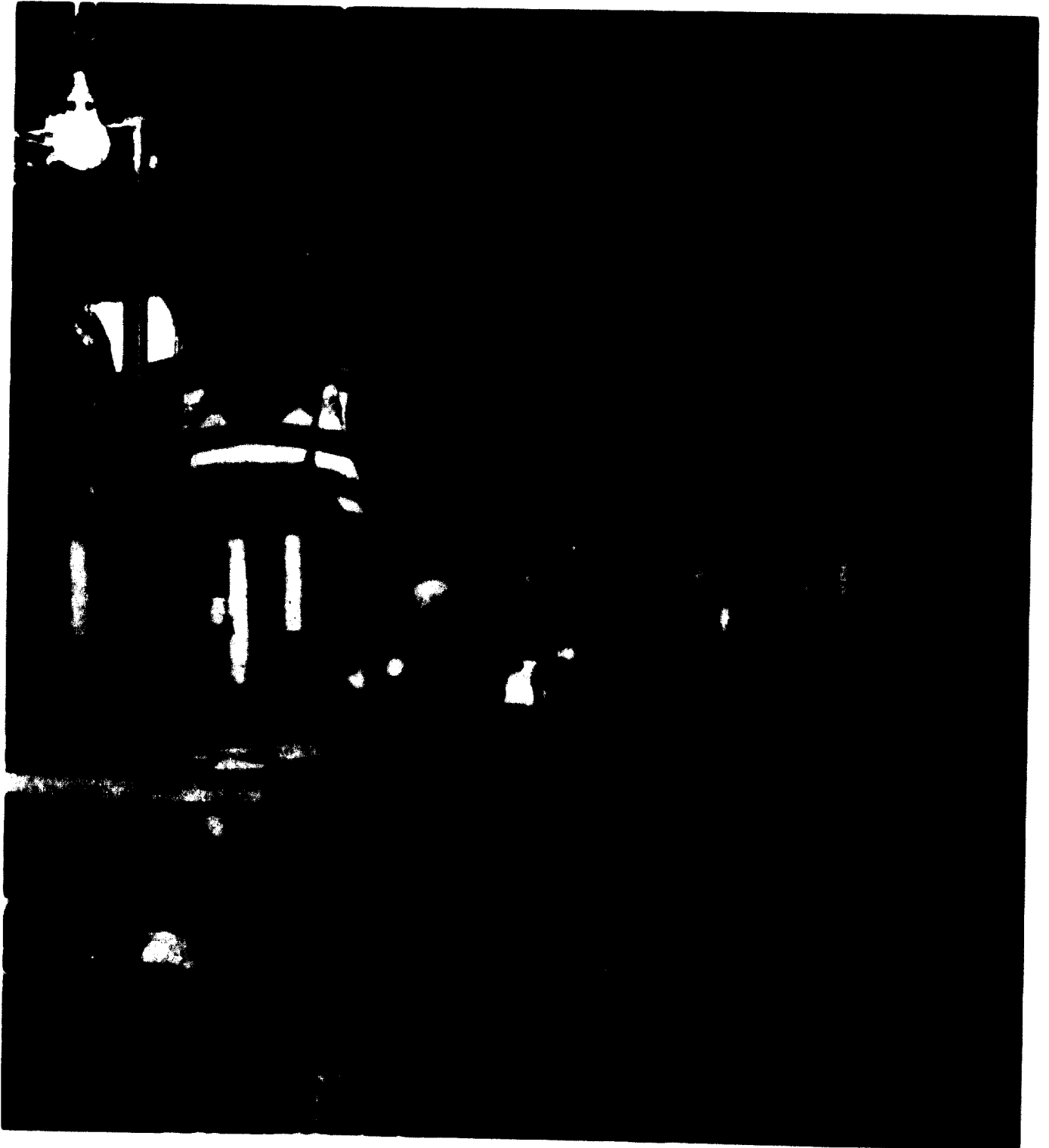
### PROCUREMENT REGULATIONS

The Armed Services Procurement Regulation (ASPR), formulated and published by the Secretary of Defense, contains in Part 7 the mandatory provisions of the small-business programme which are to be carried out in all

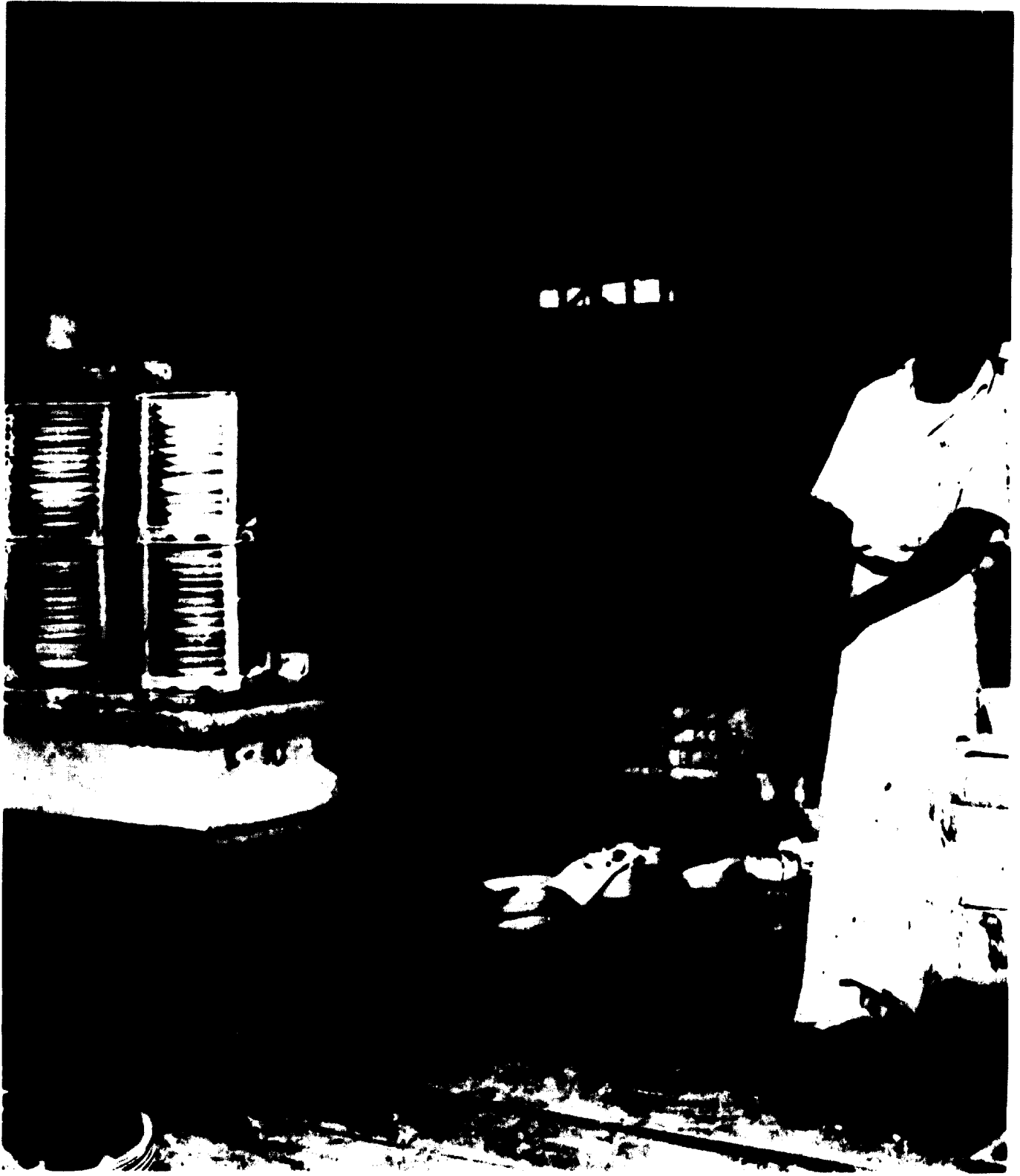
procurement agencies within the Department of Defense by contracting officers, buyers, and small-business specialists. Since military requirements and the conditions affecting their production are constantly changing, the ASPR Committee—which meets weekly—makes frequent revisions in this Regulation. The Small-Business Advisers to the heads of the procurement agencies make up an *ad hoc* subcommittee to the over-all committee and deal with all matters related to small-business procurement. Any proposed revisions to the ASPR which might affect small-business contract or subcontract opportunities are submitted also to the Small-Business Administration for its views and comments.

The Federal Procurement Regulation, formulated and published by the Administrator of the GSA, contains (in Part 7) provisions similar to those of the small-business programme and is binding on all civilian purchasing agencies of the Federal Government.

*A small knitting workshop in Kabul, Afghanistan*







*Crockery being removed from the kiln in a ceramic factory in Ceylon*

#### PUBLICIZING PROPOSED PROCUREMENT

All unclassified proposed procurements made by a governmental procurement agency and having an estimated value of \$10,000 or more are publicized in the *Commerce Business Daily*. These notices show the type of item to be purchased, the name and address of the purchasing office, the name of the buyer, the Invitation for Bid (IFB) number or Request for Proposal (RFP) number, the date by which bids or proposals must be received, and whether or not the proposed procurement has been set aside for exclusive participation of small enterprises. Interested potential suppliers are thus informed of proposed procurements and can secure the IFB's or RFP's, as the case may be, by writing to the appropriate buyer. The *Commerce Business Daily* is mailed to all subscribers, normally about 25,000, for a nominal fee and is also made available free of charge at hundreds of localities such as local Chambers of Commerce in the United States.

#### PUTTING SMALL BUSINESS CONCERNS ON BIDDERS' MAILING LISTS

In the United States a business concern desirous of being enrolled on the bidders' mailing lists for specific items on which it may wish to bid can do so by filling out an application on standard form 129. In the Air Force and in the GSA, this form must be filed with the district or regional office covering the territory in which the enterprise is located. These offices process the application to ensure its adequacy, as well as the reliability of the applicant, and forward it to the purchasing office or offices where procurements of the items listed by the applicant take place. The concern's name is then entered on the appropriate mailing list and thereafter the concern automatically receives IFB's or RFP's on future procurements of those items. Repeated failure to reply to these solicitations may result in the name being removed from the list, but in such cases the concern is notified and given an opportunity for reinstatement. In general, this has been found to be a satisfactory device and thousands of small business concerns are so registered.

Most of the complaints against the effectiveness of the mailing list device have upon investigation been found to be due to the applicant's carelessness in properly scanning the particular items in which he is interested. Particularly in the case of lists issued by military departments, the nomenclature can be quite confusing. Small-business specialists in the AF district offices and the GSA regional offices are in the best position to advise the applicant on this point when the form 129 is being made out.

Despite its seeming effectiveness, the mailing list device has been challenged from time to time by the purchasing offices of the military departments which point out the large costs involved in automatically mailing out bid sets, in relation to the number of actual bids received. Several studies made by the Air Force on this problem have indicated that more actual bids or proposals were received from small business concerns which had learned of the proposed

procurement solely from the *Commerce Business Daily*, than from those which had been registered in the bidders' mailing list.

In India a different procedure is in effect. Small enterprises interested in government procurement are registered with the NSIC after having their applications processed by the Small-Industries Service Institute which co-operates with the Corporation in the conduct of its procurement programme. In this processing the Institute determines the capability of a concern to satisfactorily produce or supply the items for which it desires to be registered. The NSIC screens all proposed procurements for those items for which small potential suppliers have been satisfactorily registered with the NSIC. The Corporation itself then sends bid sets to the registered enterprises, and the bidders submit their quotations directly to the buyers. Rarely does a registered supplier fail to respond, so waste of bid sets is practically eliminated. Over 11,000 small enterprises in India were registered with the NSIC by 1963.

#### ACTIVITIES CONDUCTED IN PURCHASING OFFICES IN THE UNITED STATES ON BEHALF OF SMALL CONCERNS

In the United States the small-business specialist of the procurement agency, assigned to a purchasing office, receives a copy of all requirements or proposed procurements before the buyer commences procurement action. In his screening of these copies the specialist determines whether or not the items to be procured might be suitably produced by small enterprises, and whether there are any small enterprises on the bidders' mailing lists for those items. Having found suitable items, the specialist informs the respective buyer to that effect and they then meet to discuss the manner in which the procurement will be handled and the conditions which the buyer imposes. This joint discussion involves many questions. Will the procurement be handled by "formal advertising" (public opening of sealed bids) or, when authorized by regulation, by negotiation? Is the required delivery schedule reasonable? If not, can it be changed to the satisfaction of the using agency? Are the quantities called for so large that small suppliers cannot participate? If so, can the quantities be broken down into smaller packages without damage to the over-all requirement? Will specifications accompany the bid-sets, and if not, where may they be obtained? Is there a reasonable expectation that bids or proposals will be obtained from a sufficient number of responsible small business concerns so that awards may be made at reasonable prices and the procurement set aside for the exclusive competition of small business concerns? Should there be any disagreement on these matters which the small-business specialist and the buyer cannot resolve, the question is submitted to the Director of Procurement at the installation and his decision is final. In practice, the disagreements have been few and far between and for good reason; both the buyer and the small-business specialist have been thoroughly indoctrinated during regularly conducted instruction courses as to the necessity of a sound small-business programme and the benefits that

accrue to the procurement agency through its effective conduct.

Up to 1965 Small-Business Administration representatives were also assigned to the major purchasing offices of the agencies and they took part in the "set-aside" discussions. This procedure was discontinued on the finding of the SBA that it was largely a duplication of effort. When the circumstances are appropriate, contracting officers and buyers are required by regulation to make small-business set-asides even in the absence of a small-business specialist of their own agency. The "set-aside" device, together with the results of its use, is described later in this article.

When the bids or proposals have been received and evaluated and the buyer has made his decision as to which bidder will receive the award, pending the approval of the procurement review committee, the buyer again meets with the small-business specialist to satisfy him that the procurement has been handled in accord with the previous agreements, and secures his initialing of the document. If the specialist is not satisfied he reports that fact, together with his reasons, to the procurement review committee which takes appropriate action. Such instances are few and far between, but this procedure provides a safeguard against ill-considered action on the part of either the buyer or the small-business specialist.

Through the activities in the purchasing offices of the United States (described above) prime contract awards to small concerns made by the procurement agencies within the Department of Defense increased from \$3,440 million in the fiscal year 1960 (16.1 per cent of total procurement) to \$5,305 million in 1965 (20.3 per cent of total procurement).

In the total procurement figures of the Department of Defense are the huge amounts spent for aircraft, naval vessels, missile and space systems, and certain other systems, all of which are far beyond the capabilities of small enterprises as prime contractors. The Air Force, since the very inception of its small-business programme in 1951, has therefore maintained records showing the successful participation of small concerns in the potential, that is, in the total amount for which they submitted bids or proposals. This usually came to 60 per cent or more and reached a high of 71 per cent successful bidding in the 1961 fiscal year.

As stated earlier, the General Services Administration purchases only non-military items of a commercial or "off-the-shelf" nature, and regularly spends over 50 per cent of its procurement dollars (other than for heavy building projects) with small business concerns. Its records show that in the 1965 fiscal year, its prime contracts with small business concerns amounted to \$321 million, which represented 53.8 per cent of the total, again excepting building construction contracts.

In the United States, price-differentials for small-business bidders have not been authorized since World War II. In India, where a quite different industrial situation exists, all awards to small enterprises result either from price-

differentials or from set-asides, which will be discussed later on.

#### SMALL-BUSINESS SET-ASIDES IN THE UNITED STATES AND IN INDIA

There are three types of small-business set-asides: (i) partial, (ii) total and (iii) class.

In a *partial set-aside*, a specified portion of the procurement (generally 50 per cent) is reserved for exclusive bidding by small business concerns. The unreserved portion is offered to all bidders regardless of size and awards are made in the usual manner. The small business concerns which submitted responsive bids on the unreserved portion at a unit price within 120 per cent of the highest unit price at which an award was made in the non-set-aside portion are given an opportunity to match that unit price for an award in the reserved portion. Negotiations are conducted first with the small concern whose original bid was closest to that of the successful bidder; if the concern cannot match the unit price, negotiations will be conducted with the next in line, and so on up the ladder. Should no small-business bidder agree to meet the predetermined price, the reserved portion is then released and negotiated with the successful bidder on the original unreserved portion.

Partial set-asides are authorized neither in procurements of construction nor when a total set-aside would be appropriate. They are authorized only when, in the judgement of the buyer, a procurement is divisible into two or more economic production runs or reasonable lots. Because of these restrictions on their use, the cumbersome and time-consuming mechanics of their operation, and the costly administration of two resulting contracts, partial set-asides are infrequent. Most procurement agencies do not use them at all and they are not authorized in India.

*Total small-business set-asides* are not only authorized but required in the United States on individual procurements if the contracting officer or buyer decides that there is a reasonable expectation of bids or proposals being obtained from a sufficient number of responsible small business concerns so that awards may be made at reasonable prices. Total set-asides are not made unless such a reasonable expectation exists, and the small-business specialist assigned to the purchasing office usually assists the buyer in making that decision. It is possible that in barring competition from large business concerns the Government may have to pay a higher price than necessary, but such a fact is difficult to establish and the Government considers it to be an acceptable risk. Total set-asides are widely used on a steadily increasing scale in the United States.

*Class set-asides* are implicitly total set-asides, the only difference being that class set-asides are practically automatic once the item involved has been decided upon by agreement between the buyer at a particular installation and the small-business specialist or the SBA representative. When time after time it has been found that a particular article or service can be satisfactorily procured from bids

exclusively reserved to small business concerns, the item is considered to be an automatic "class set-aside". In the United States class set-asides are determined on an installation-by-installation basis, that is, an item may be a class set-aside at one installation although not at another. In India this is the only type of set-aside used and it applies to all government purchasing offices wherever located. Only small enterprises, competing among themselves, are permitted to bid on these procurements. In 1956, at the start of the Indian Government's small-industries procurement programme, 16 items were reserved exclusively for purchase from small enterprises, regardless of the location of

the purchasing office. By 1965 the list (table 2) had been increased to 72 items and as the capabilities of small concerns are demonstrated, it is planned to add many more such items. Since in the United States class set-asides are instituted on an individual installation basis, a buyer may decline to recognize the class set-aside for a particular procurement—even though it normally falls within that category—if he determines that, under the special circumstances surrounding that particular procurement, a set-aside would be detrimental to the Government's interest. In such cases the buyer must secure the approval of higher authority and must document his files accordingly.

Table 2  
YEARLY ADDITIONS TO INDIAN CLASS SET-ASIDE LIST

<i>1956-1957 (16)</i>		
1. Padlocks, brass	40. Caps, woollen	
2. Padlocks, G.I.	41. Belts, leather and strips	
3. Dampers, brass	42. Wheelbarrows	
4. Boxes, metal (other than for army)	43. Tarpaulins (other than for army)	
5. Sign boards, painted	44. Brushes	
6. Buttons, metal	45. Brooms	
7. Postal weighing scales	46. Trunks, steel (other than for army)	
8. Badges, cloth embroidered and metals (other than for army)		
9. Belts, leather (apparel)	<i>1962-1963 (12)</i>	
10. Cash bags	47. Hides and country leather (other than for army)	
11. Dust shields, leather	48. Railway platform drinking water trolleys (other than for army)	
12. Chappals and sandals	49. Umbrellas (other than for army)	
13. Boxes, leather (other than for army)	50. Vehicles, animal drawn (other than for army)	
14. Laces, leather	51. Sheep-skins (other than for army)	
15. Bags, leather	52. Carts, hand drawn (other than for army)	
16. Boots and shoes (other than for army)	53. Sole leather (other than for army)	
	54. Harnesses, leather (other than for army)	
<i>1959-1960 (11)</i>		
17. Ampoules, glass	55. Ghamellas (other than for army)	
18. Handles, wooden and bamboo	56. Dustbins (other than for army)	
19. Soap, washing and laundry (other than for army)	57. Cooking utensils (except stainless steel utensils and vessel pressure cookers) (other than for army)	
20. Metal polish	58. Ice bags (other than for army)	
21. Scissors, cutting		
22. Coir fibre and coir yarn	<i>1962-1963 (5)</i>	
23. Lead seals, postal	59. Cases, wooden packing (other than for army)	
24. Hosiery, cotton (other than for army)	60. Signal lamps (other than for army)	
25. Hosiery, woollen (other than for army)	61. Gauzes, surgical (other than for army)	
26. Keys, wooden	62. Coats and pyjamas for hospital patients (other than for army)	
27. Stone curry and stone curry roller	63. Dusters, cotton	
<i>1961-1962 (19)</i>		
28. Caps, cotton (other than for army)	<i>1963-1964 (7)</i>	
29. Mosquito curtains	64. Pashm wool	
30. Tape, cotton	65. Heel tips, nail, rustless	
31. Bandages, cloth	66. Camblics	
32. Garments	67. Washers, leather	
33. Wicks, cotton	68. Weights, metric	
34. Stockinettes	69. Trays, tin	
35. Rags, cotton	70. Teak, round blocks	
36. Blacksmiths hearths		
37. Kodali	<i>1964-1965 (2)</i>	
38. Baskets, cane	71. Kit bags	
39. Lathis	72. Mail bags	

#### STATISTICAL RESULTS OF SMALL-BUSINESS SET-ASIDES

The small-business set-aside device originated with the Small Defense Plants Administration in June 1952 with the acquiescence of the Department of Defense. With the advent of SDPA's successor agency, the Small-Business Administration (SBA), set-asides became a fully recognized factor in the small-business programmes of every government procurement agency. Awards to small business concerns in which set-asides were involved mounted rapidly from \$161 million in the 1954 fiscal year to \$2,350 million in 1964. Though it can be, and is argued, that even without the use of the set-aside device, the greatest part of these awards would have gone to small business concerns, there can be little question but that the use of set-asides, and particularly "class set-asides", has increased the participation of small concerns as prime contractors in government procurement. It should be noted, however, that analysis of all available statistics reveals the fact that in the United States small business concerns received a far greater amount of awards in free and open competition with large business concerns than they did through the use of set-asides, a fact which speaks well for their competitive ability.

In a newly developing nation such as India, the use of set-asides, and even of price-differentials for small concerns when set-asides are not feasible, is a necessity, and the

experience of the United States with these devices should prove helpful despite the different environment.

In India the employment of small-business class set-asides, though increasing, is still relatively small. The healthy increase in the small enterprises' participation in government purchases is largely the result of the use of a price-differential device. Wherever the Directorate General of Supplies and Disposals (DGS&D), which does most of the buying for all government agencies, has a purchasing office, the National Small Industries Corporation (NSIC) has set up a liaison office, and all proposed procurements are screened jointly by the NSIC liaison officer and an officer nominated by the purchase office. A technical officer from the Central Small Industries Organization (CSIO) also takes part in this screening, and agreement is reached as to which procurements are suitable for small-business consideration. Items which are not included in the class set-aside list, but for which the NSIC has registered small-business potential suppliers, are made available to these concerns to whom up to a 15 per cent price preference in competition with large industrial enterprises may be given. The use of class set-asides and price-differentials, the devoted efforts of the NSIC and the co-operation of the DGS&D produced in a seven-year period (1957-1964) a fourteenfold increase in the value of awards to India's small independent enterprises (table 3).

Table 3

YEARLY SHARE OF SMALL INDUSTRIES IN THE TOTAL INDIGENOUS PURCHASES BY THE INDIAN DIRECTORATE GENERAL OF SUPPLIES AND DISPOSALS (EXCLUDING ITEMS NOT PRODUCIBLE BY SMALL INDUSTRY)

	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65
	<i>Rupees (in crores)</i>							
1. Purchases made by DGS&D from indigenous sources .....	158.91	161.38	153.14	180.47	206.69	353.36	452.68	357.44
2. Purchases made by DGS&D of stores <sup>a</sup> not producible by small-scale units .....	90.96	84.98	94.54	132.25	123.31	172.03	234.74	208.27
3. Balance purchases of stores producible by small-scale units .....	67.95	76.40	58.60	48.22	83.38	181.33	217.94	149.17
4. Total purchases from small-scale units enlisted with NSIC and DGS&D, etc. ....	2.63	4.56	4.27	6.47	11.78	29.55	39.09	20.00
5. Ratio of purchase (line 4 : line 3) (per cent) .....	4	6	8	14	14	16	18	14

<sup>a</sup> The stores taken into account in these figures are: food, tobacco, mill cloth, jute, mill-made paper, rubber tires and tubes, cement, petroleum, asphalt, basic metals, non-ferrous metals, matches, automobiles, permanent way material, cast iron and steel sleepers, tire steel, crossing sleepers.

#### SMALL-BUSINESS PARTICIPATION IN FORMALLY ADVERTISED VERSUS NEGOTIATED PROCUREMENTS

In some quarters of the United States the feeling prevails that the use of formally advertised procurements (sealed bids followed by public opening) is more beneficial to small concerns than is the use of the competitively negotiated method of making procurements. Statistics, when properly read, do not bear out this contention. Procurement Regulations, both federal and military, require the use of formal advertising whenever possible, and the use of the negotiation method is authorized solely when it is the only method by which a procurement can be satisfactorily

handled. Most of the huge, dollar-value items in military hardware (complete aircraft, for example) can only be procured through negotiation, but these items are quite beyond the production capabilities of small enterprises, regardless of the procurement method used. As to those items within the production capabilities of small concerns (i.e., the small-business potential), small business concerns have proved to be at least as successful in bidding when the procurements are negotiated as when they are formally advertised. This is substantiated by United States Air Force records; the figures for the 1963 fiscal year were:

Total value of procurements within the small-business potential handled in open competition.....	\$923,119,000
Formally advertised actions on which small firms bid .....	\$223,600,000
Small-business awards .....	\$104,174,000
Percentage awarded small business ..	47
Negotiated actions on which small firms bid .....	\$699,519,000
Small-business awards .....	\$348,105,000
Percentage awarded to small business ..	50
Total small-business awards in open competition.....	\$452,279,000
Percentage awarded to small business ..	49

(The above figures do not include set-aside awards made to small business as they are not regarded as being open competition. These set-asides amounted to an additional \$199,309,000 for small concerns.)

#### CERTIFICATES OF COMPETENCY

In the United States, when the purchasing office has decided as to which concern is the successful bidder, an immediate on-the-spot inspection of that concern is made, prior to the award of the contract, by the appropriate field office of the procurement agency to determine whether it is capable of satisfactorily fulfilling the contract. If the report of the inspection team is negative and the prospective contractor is a small business concern, the report is immediately submitted to the nearest field office of the Small-Business Administration which then makes its own independent inspection. If its finding is favourable, it notifies the procurement agency accordingly and issues a Certificate of Competency which over-rides the finding of the procurement agency. This over-riding authority has been specifically given the SBA by the Congress, and in actual practice it has benefited both the small-business community and the Government. It has also brought about more carefully considered inspections on the part of the procurement agencies. In 1964 alone, 187 awards totalling \$26,260,000 were made to small enterprises which would not have received them except for the issuance of these certificates by the Small-Business Administration; with exceedingly few exceptions the performance of the small enterprises has been completely adequate.

In India the procedure is somewhat different. Prior to its being given an opportunity to bid a small concern is examined regarding capacity, credit and competence by the Small Industries Service Institute of the state in which the plant is located. Before making an award to the successful small-business bidder, the purchasing office of DGS&D calls for a Certificate of Competency from the National Small Industries Corporation which issues it only after consultation with the appropriate Small Industries Service Institute. Normally the purchasing office accepts such competency certificates, but in the case of items whose production involves exceptional operational efficiency and safety, the procurement agency may make its own on-the-spot inspection. If its findings are negative, they over-ride

the certification of the NSIC. When feasible, small trial orders may nevertheless be placed by the purchasing office to assist the small enterprise in improving its competence, and to test the findings.

#### ASSISTANCE TO SMALL-BUSINESS CONTRACTORS

In both the United States and India, assistance is offered to small-business contractors in successfully performing their contracts. In the United States, assistance is provided both by the contract administration branch of the procurement agency, which is interested in having the items produced on time, and by the SBA, which is responsible to the Congress for aiding and assisting the nation's small business concerns. Their activities are compatible and are therefore co-ordinated. Both groups assist small-business contractors in overcoming manpower problems, transportation road-blocks, delays in obtaining needed raw materials or components and other unforeseen difficulties. If by taking on a government contract, a small business lacks sufficient working capital, the need is met by the procurement agency itself under prescribed conditions. Progress payments, as authorized by the Department of Defense, are explained in the publication *Small Business and the Air Force*, August 1963 (see annex I). Similar provisions are made by other Federal procurement agencies. Only occasional recourse to progress payments has been made by small prime contractors, and even less by small sub-contractors.

In India, the National Small Industries Corporation has worked out an arrangement with the State Bank of India and the Government of India Reserve Bank to enable small enterprises receiving government contracts, whether from central or state purchasing offices, to finance the performance of those contracts. It is known as "NSIC Guarantee No. 2" and was put into effect in late 1965, succeeding the earlier Credit Guarantee Scheme which had been found inadequate. Under the revised scheme, a small-business contractor, when approved by the NSIC and the appropriate Small Industries Service Institute, may obtain a loan from the State Bank of India to finance all stages of production, from the purchase of raw material to the discounting of bills. The State Bank advances are covered by a 70 and a 30 per cent guarantee from the Reserve Bank of India and the NSIC respectively.

#### DEFINITIONS OF SMALL BUSINESS CONCERNS IN THE UNITED STATES AND IN INDIA

Before price-differentials and set-asides were instigated, the definition of what constitutes a small enterprise was of value only in showing the amount and proportion of government purchases that were placed with the smaller segment of the industrial economy; industry itself was not affected. When the aforementioned distinct preferences came into being, however, the definition became vitally important, for it determined what specific business concerns were entitled to these preferences.

In the United States the responsibility for defining "small business concerns" was placed by the Congress upon the SDPA and later upon the SBA, and they were given some general guidelines. Recognizing the complexity of the problem, particularly in the placement of government contracts, first the one, and then the other of these agencies went along with the long-established rule of thumb that a small business concern was one independently owned and having fewer than 500 employees. Such a definition, of questionable validity in all circumstances, had at least the virtue of being administratively simple to apply to the government procurement programme. The Congress, not being satisfied with this approach, made it mandatory on the SBA to establish more realistic definitions on an industry-by-industry basis and required the procurement agencies to adhere to the ensuing definitions. The SBA, after a great deal of consideration and discussion with industry, thereupon issued a number of size-standards embracing various categories of manufacturing industries, non-manufacturing industries, service industries, transportation industries, research, development and testing industries, plus differing definitions for a firm engaged in subcontracting as distinguished from prime contracting. The basic consideration underlying all these multiple definitions is that a small business concern is an

independently owned and operated concern not dominant in the field of operation in which it is bidding for government contracts. The list of specific definitions resulting from this basic consideration is too long to be included in this article. It is published in full in the Armed Services Procurement Regulation and in the Federal Procurement Regulation.

These multiple definitions created a problem for the procurement agencies, particularly in the making of set-asides, as many concerns were actively engaged in more than one industry as manufacturers, non-manufacturers, or both. It devolved upon the buyer to determine which definition would be used in the making of a particular procurement. These difficulties have been reasonably resolved by referring questionable cases to the SBA, whose decision is final. A continuing study is being made by the SBA with the collaboration of the procurement agencies to make these multiple definitions easier to apply and to minimize delays in procurement action.

In India, several definitions have been tried out and subsequently discarded. The current one, quite simple in application, is: regardless of the number of employees or volume of sales, a small industrial concern is one which has fixed assets—land, buildings and equipment—up to the value of 500,000 rupees (approximately \$US104,000).

## SMALL-BUSINESS SUBCONTRACTING PROGRAMME IN THE UNITED STATES

### HISTORY OF THE PROGRAMME

EARLY IN 1951 it was recognized that in order to provide small enterprises with a "fair proportion" of governmental purchases and also to enable them to make their important contribution to production for defence, it would be necessary for them to have subcontract as well as prime contract opportunities. This was particularly important in the case of the Air Force, since from 85 to 90 per cent of its procurement dollars was paid to very large industrial organizations. Thus a strong small-business subcontracting programme was developed on a voluntary basis in 1952. Its success led to its being adopted

by the Department of Defense which made it a mandatory programme for all large defence contractors. This programme was quickly followed by legislative action which extended it to large contractors of all government departments and established the SBA as a participant in the undertaking.

### DETAILS AND CONDUCT OF THE PROGRAMME

Since the provisions of the programme are adequately covered in the Armed Services Procurement Regulation, the salient and pertinent paragraphs of that regulation are given in annex II.

Table 4  
PARTICIPANTS IN THE DEFENSE SMALL-BUSINESS SUBCONTRACTING PROGRAM (BY FISCAL YEAR)  
(In millions of dollars)

	1958	1959	1960	1961	1962	1963	1964	1965
1. Number of large contractors reporting ...	294	298	298	309	378	453	617	601
2. Military subcontracts <sup>a</sup> .....	9,026	9,144	9,666	9,407	10,560	11,411	9,278	8,518
(a) To small business concerns .....	3,242	3,336	3,587	3,495	4,011	4,341	3,629	3,534
(b) To other business concerns .....	5,784	5,808	6,079	5,912	6,549	7,070	5,649	4,984
3. Percentage of total to small business concerns (line 2(a) ÷ line 2) .....	35.9	36.5	37.1	37.2	38.0	38.0	39.1	41.5

<sup>a</sup> Represents commitments starting with fiscal year 1964 and payments for prior years.

## A LOOK AHEAD

### HIGHLY INDUSTRIALIZED NATIONS

THIS IS AN era of mergers. Large corporations are combining into still larger entities, smaller concerns are merging with one another, and many smaller enterprises are being taken over by large industrial organizations to which they become subsidiaries. Despite this process, which is going on in all highly industrialized nations, alert Governments can undertake certain steps to minimize the losses to the small business community and to encourage the establishment of new enterprises by courageous and ambitious *entrepreneurs*. Most of these helpful activities are outside the scope of this article but those which fall in the field of government procurement, both prime contracting and subcontracting, will be pointed out.

In its own direct purchases (i.e., prime contracting) the Government can, and should, take a careful look at the items to be purchased and make a studied and serious effort to "break out" from the end-item such sub-assemblies, parts or components, which could be satisfactorily produced by small competent enterprises. Although this might seem to be the antithesis of "systems" procurement, it actually is not. The procurement of a weapons system, or of a communications system, from one large prime contractor—often in co-operation with other large associated prime contractors—is a natural evolution which occurs over the years due to the desire to ensure the reliable performance of the task for which the weapon or communication network was designed. Such procurement must continue to have priority, but caution should be exercised lest this concept be abused for purposes of convenience. Experience in the use of "systems" procurement by procurement agencies of the military departments of the United States has shown some instances of such abuse. Even on the part of civilian agencies experience has shown a trend toward "systems" procurement of lesser items where its use is not required.

Justification for these "abuses" is frequently based on the argument that subcontracting requirements will provide the desired alleviation or correction, but this is begging the answer. The Government should not require its prime contractors to take actions which, for reasons of convenience only, it is unwilling to take itself.

The prime consideration in determining break-outs is that the performance reliability standard of the end-item itself be maintained. When this is ensured, many opportunities will be found to award prime contracts for sub-assemblies, parts and components, to small business concerns that are now being neglected.

With regard to prime contracting, government procurement agencies should also maintain constant surveillance of their practices to ensure that small potential sources are, in fact, given adequate and timely notice of procurements to be made, and are provided without delay with all the necessary specifications needed to prepare a carefully considered quotation. All of this takes extra time and effort on the part of purchasing officers, buyers and evaluation experts, and

obviously cannot be accomplished properly unless sufficient manpower is made available—a point which even the wealthiest of nations sometimes fails to recognize.

Operational aspects of a well-considered small-business prime contracting programme can be handled most effectively by the procurement agencies' own personnel, specifically assigned and trained to that task. The task of an independent "outside" agency should be solely that of evaluating the results of the programme, bringing any failures to the direct attention of the responsible procurement officials, and working with them on the formulation of policies to make the programme more effective. The proper perspective must be maintained at all times; the programme must contribute to, and never impede, the over-all mission of the procurement agency.

When all this is said and done, the importance of a thoroughly sound subcontracting programme, aggressively pursued and acceptable to large prime contractors, must be pointed out. Despite the directives of the procurement agency and the published regulations and contractual clauses, it must be recognized that if a small-business subcontracting programme is to be effective, it must have the sincere support of the procurement officials of the large prime contractors, as it is their buyers who will carry it out. To secure that support, these officials must have an opportunity to take part in the formulation of the programme. Inasmuch as the large prime contractors or, for that matter, large subcontractors were selected largely because of their recognized management ability, their support—if they have helped to formulate the programme—is assured.

In all the points raised above regarding prime and subcontract programmes in highly industrialized countries, there is no mention of price-differentials or of "set-asides" (i.e., procurements in which large business concerns are not permitted to compete). Price-differentials are not authorized in the United States and, while small-business set-asides are an accepted and widely used method of procurement on selected items, the author's view is that they are not needed and perhaps are even harmful to the small-business community. In normal activities small business concerns must compete with all others—large, medium and small—to secure non-government contracts. There would seem to be no reason why they should be protected from large business competition where a government contract is involved, provided, and this is an important provision, the Government offers a fair and equitable opportunity for them to compete.

By avoiding price-differentials for small concerns and small-business set-asides, the small-business procurement programme will be enhanced in two respects. First, because no specific potential sources are favoured and none is discriminated against, there would be no need in competing for a particular contract for explicit definitions as to what constitutes a small business concern. For the benefit of professional economists and of those charged with



evaluating the effectiveness of the small-business programme, records could be readily maintained and published, showing the number and dollar value of contracts placed in different employee-number categories; for example: 1-100; 101-250; 251-500; 501-1,000; 1,001 and over. This would provide the desired and useful information, and no business concern would be hurt.

Second, the time, energy and ability of the contracting officers, buyers, and small-business specialists, all of whom are charged with conducting a small-business programme as an integral part of the procurement process, could be devoted to the productive task of uncovering more opportunities for competition from small enterprises, rather than merely safeguarding the known opportunities.

#### NEWLY INDUSTRIALIZING NATIONS

Some of the newly developing nations have decided, or are deciding, that agricultural development is at this time more important to the welfare of their peoples than industrial development. Industrialization is not the end-all and be-all of the welfare, happiness or independence of every newly developing nation. Understandable and welcome as this attitude is, a certain amount of industrial development, specifically related to and necessary for increased food production, could well be explored. Hundreds if not thousands, of small, independently owned and operated concerns will need to be established and helped in overcoming their "growing pains" until they can stand on their own feet and make their contribution to their nation's economy. Government procurement provides an immediate and ready means of accomplishing this.

A small-industries agency of the central Government might be set up, staffed by personnel familiar with the level of existing industrial capabilities, and devoted to a national programme which would not only promote the growth of small industries but which would also encourage entrepreneurs to make use of native skills and indigenous materials in the establishment of new enterprises. Such a programme would, of course, involve financial assistance, management training, technician training to provide productivity, assistance in locating or building efficient factory units and equipping them with the hand tools and machine tools needed. But, as pointed out in the preface of this

treatise, all this would be of no avail unless the small industries were provided with orders for articles or services. Here is where government procurement comes in, and the following steps, already tested by the Government of India, are suggested:

1. Establishment of a small-industries agency by the central Government.
2. Careful screening by that agency, jointly with officials of the purchasing agencies, of all articles and services the Government intends to purchase; the purpose of this screening is to determine which articles might be produced locally rather than be imported.
3. Additional screening to determine the possibility of having these items produced by small independent enterprises rather than by large industrial concerns, regardless of whether these latter concerns are in the public or private sector.
4. Employment of the practices developed and invoked by the Small Industries Corporation of the Government of India to channel purchases of items which can be competently produced by small business to the previously inspected small enterprises. This can be done by making use of such preferential treatments as prices-differentials and small-business class set-asides.
5. A fair but reasonably simple definition should be established of what constitutes a small industrial concern. This definition should be flexible and should not discourage the growth of the relevant industrial concerns, either as regards the number of employees or the volume of productivity.
6. In the case of end-items which at the outset cannot be satisfactorily produced by small enterprises and must be produced by large concerns, government sanction should be secured for a specific subcontracting programme on the part of these latter concerns in the public or private sector, regardless of whether or not they have government contracts.

Although the above suggestions are based on wide experience, each country's programme should be "tailored" to meet its own specific conditions. The small-industries agency should establish and maintain close liaison with its counterparts in other newly industrializing nations for their mutual benefit.

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## ANNEXES

### ANNEX I

#### PROGRESS PAYMENTS<sup>1</sup>

##### *Department of Defense Progress Payments Fact Sheet*

This fact sheet is applicable to small business Defense contractors and subcontractors. It answers questions on progress payments generally raised by small business concerns.

1. *What are progress payments?*

They are payments made by a Department of Defense procurement agency to a firm working on a defense contract, or, by a defense prime contractor to a firm working on a defense subcontract, as unfinished work progresses. There are no interest charges for such payments.

2. *What is their purpose?*

To enable the firm to cover the major part of its incurred costs under a fixed-price type of contract when there is a long preparatory period (normally six months or more) between the beginning of work and the expected first delivery involving substantial predelivery costs that may have a material impact on the firm's working funds.

3. *What is meant by "a major part of incurred costs?"*

70% of total costs incurred, or, 85% of direct labor and material. *Exception:* in the case of small business restricted advertising when the percentages may be 75% and 90%.

4. *Do progress payments cover costs for real estate improvements, machinery, or equipment?*

No, nor do they cover other costs that are ordinarily capitalized and subject to depreciation or amortization.

5. *How does a source, or potential source, know whether progress payments are available?*

Unless the bid-set itself expressly covers the point, ask the contracting officer or the prime contractor's buyer.

6. *What conditions must be met by a defense contractor in order to get progress payments provided for in a contract?*

He must have, or establish, an accounting system with controls sufficient and reliable enough to segregate and accumulate costs incurred on the defense contract as distinct from any other work he may be performing.

7. *Does a business concern have to prove that it needs progress payments to enable it to perform the contract?*

No, it does not.

8. *If the IFB or RFP states that progress payments are available, does a request for progress payments (at the time of submitting a bid) put the bidder at a disadvantage in the competition?*

No. When progress payments are provided for in the Invitation for Bids, a business firm's request for them is not considered a handicap or an adverse factor in award of the contract.

9. *Are progress payments available from a prime contractor to potential or actual subcontractors under the same circumstances as they are to potential or actual prime contractors?*

Yes, they should be. It is Department of Defense policy that subcontractors should get progress payments from their customers on the same standards applicable to prime contracts. In furtherance of this policy, current standard progress payment clauses for prime contracts contain the express agreement of the prime contractor to provide progress payments to subcontractors which are

small business concerns, conforming with published standards for prime contract progress payments.

10. *How may a small business (potential or actual) subcontractor know if progress payments to subcontractors are provided for in the contract held by the prime contractor, and if they will be allowed on the particular subcontract for which he is competing?*

By asking the purchasing agent, or the Small Business Liaison Officer, of the prime contractor with whom he is dealing.

11. *If a small business (potential or actual) subcontractor feels he is not receiving full consideration from the purchasing agent of a prime contractor, what recourse does he have?*

The matter should be frankly discussed with the Small Business Liaison Officer of the prime contractor. Every large defense prime contractor has one such official or more. It is their responsibility to insure that small business concerns are given fair and equitable treatment in all their dealings with the company.

12. *If a small business (potential or actual) prime contractor feels he is not receiving full consideration from a military agency contracting officer, what recourse does he have?*

The matter should be presented to the military department small business specialist assigned to the purchasing office in question. This specialist is responsible to the Chief of the Contracting Office for insuring that small business concerns are given fair and equitable treatment in all their dealings with that office.

### ANNEX II

#### **1-707 Subcontracting With Small Business Concerns<sup>2</sup>**

##### **1-707.1 General.**

(a) It is the policy of the Government to enable small business concerns to be considered fairly as subcontractors to contractors performing work or rendering services as prime contractors or subcontractors under Government procurement contracts, and to assure that prime contractors and subcontractors having small business subcontracting programs will consult through the purchasing activity with the SBA at its request.

(b) The SBA is not authorized, however, to prescribe the extent to which any contractor or subcontractor shall subcontract or specify the concerns to which subcontracts shall be granted, nor does it vest in SBA authority respecting the administration of individual prime contracts or subcontracts.

**1-707.2 Small Business Subcontracting Program.** The Government's small business subcontracting program requires Government prime contractors to assume an affirmative obligation with respect to subcontracting with small business concerns. In contracts which range from \$5,000 to \$500,000, the contractor undertakes the obligation of accomplishing the maximum amount of small business subcontracting which is consistent with the efficient performance of the contract. This undertaking is set forth in the contract clause prescribed in 1-707.3 (a). In contracts which may exceed \$500,000 the contractor is required, pursuant to the clause set forth in 1-707.3 (b) to undertake a number of specific responsibilities designed to assure that small business concerns are considered fairly in the subcontracting role and to impose similar responsibilities on major subcontractors. (The liaison officer required by the latter clause may also serve as liaison officer for labor surplus area matters.)

<sup>1</sup>Small Business and the Air Force, AEP 70-1-4, 1-63.

<sup>2</sup>Armed Services Procurement Regulation, Part 7, Revision 12, 1965.

### 1-707.3 Required Clauses.

(a) The "Utilization of Small Business Concerns" clause below shall be included in all contracts in amounts which may exceed \$5,000 except (i) contracts which, including all subcontracts thereunder, are to be performed entirely outside the United States, its possessions, and Puerto Rico; and (ii) contracts for services which are personal in nature:

#### UTILIZATION OF SMALL BUSINESS CONCERNS (JANUARY 1958)

(a) It is the policy of the Government as declared by the Congress that a fair proportion of the purchases and contracts for supplies and services for the Government be placed with small business concerns.

(b) The Contractor agrees to accomplish the maximum amount of subcontracting to small business concerns that the Contractor finds to be consistent with the efficient performance of this contract.

(b) The "Small Business Subcontracting Program" clause below shall be included in all contracts (except maintenance, repair and construction contracts) which may exceed \$500,000, which contain the clause required by (a) above and which, in the opinion of the contracting officer, offer substantial subcontracting possibilities. Prime contractors who are to be awarded contracts that do not exceed \$500,000 but which, in the opinion of the contracting officer, offer substantial subcontracting possibilities, shall be urged to accept the clause.

#### SMALL BUSINESS SUBCONTRACTING PROGRAMME (JUNE 1965)

(a) The Contractor agrees to establish and conduct a small business subcontracting program which will enable small business concerns to be considered fairly as subcontractors and suppliers under this contract. In this connection, the Contractor shall—

(1) Designate a liaison officer who will (i) maintain liaison with the Government on small business matters, (ii) supervise compliance with the "Utilization of Small Business Concerns" clause, and (iii) administer the Contractor's "Small Business Subcontracting Program."

(2) Provide adequate and timely consideration of the potentialities of small business concerns in all "make-or-buy" decisions.

(3) Assure that small business concerns will have an equitable opportunity to compete for subcontracts, particularly by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation of small business concerns. Where the Contractor's lists of potential small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(4) Maintain records showing (i) whether each prospective subcontractor is a small business concern, (ii) procedures which have been adopted to comply with the policies set forth in this clause, and (iii) with respect to the letting of any subcontract (including purchase orders) exceeding \$10,000, information substantially as follows:

- (A) Whether the award went to large or small business.
- (B) Whether less than three or more than two small business concerns were solicited.
- (C) The reason for non-solicitation of small business if such was the case.
- (D) The reason for small business failure to receive the award if such was the case when small business was solicited.

The records maintained in accordance with (iii) above may be in such form as the individual Contractor may determine, and the information shall be summarized quarterly and submitted by the purchasing department of each individual plant or division to the Contractor's cognizant small business liaison officer. Such quarterly summaries will be considered to be management records only and need not be submitted routinely to the Government; however, records maintained pursuant to this clause will be kept available for review.

(5) Notify the Contracting Officer before soliciting bids or quotations on any subcontract (including purchase orders) in excess of \$10,000 if (i) no small business concern is to be solicited, and (ii) the Contracting Officer's consent to the subcontract (or ratification) is required by a "Subcontracts" clause in this contract. Such notice will state the Contractor's reasons for non-solicitation of small business concerns, and will be given as early in the procurement cycle as possible so that the Contracting Officer may give the Small Business Administration timely notice to permit SBA a reasonable period to suggest potentially qualified small business concerns through the Contracting Officer. In no case will the procurement action be held up when to do so would, in the Contractor's judgment, delay performance under the contract.

(6) Include the "Utilization of Small Business Concerns" clause in subcontracts which offer substantial small business subcontracting opportunities.

(7) Cooperate with the Contracting Officer in any studies and surveys of the Contractor's subcontracting procedures and practices that the Contracting Officer may from time to time conduct.

(8) Submit DD Form 1140-1 each quarter in accordance with instructions provided on the form, except that where the Contractor elects to report on a corporate rather than a plant basis, he may submit his reports to the Military Department having the responsibility for the Small Business Subcontracting Program at the corporate headquarters. The reporting requirements of this subparagraph (8) do not apply to Small Business Contractors, Small Business Subcontractors, or educational and nonprofit institutions.

(b) A "small business concern" is a concern that meets the pertinent criteria established by the SBA and set forth in paragraph 1-701 of the Armed Services Procurement Regulation.

(c) The Contractor agrees that, in the event he fails to comply with his contractual obligations concerning the small business subcontracting program, this contract may be terminated, in whole or in part, for default.

(d) The Contractor further agrees to insert, in any subcontract hereunder which is in excess of \$500,000 and which contains the "Utilization of Small Business Concerns" clause, provisions which shall conform substantially to the language of this clause, including this paragraph (d), and to notify the Contracting Officer of the names of such subcontractors; except that the subcontractor will submit the DD Form 1140-1 reports to the Military Department having the responsibility for reviewing its small Business Subcontracting Program. (A subcontractor may request advice from the nearest military purchasing or contract administration activity as to the Military Department to which he should submit his reports.)

(c) The "Small Business Subcontracting Program (Maintenance, Repair and Construction)" clause below shall be included in all contracts for maintenance, repair and construction work which

may exceed \$500,000, which contain the clause required in (a) above and which in the opinion of the purchasing activity, offer substantial subcontracting possibilities.

**SMALL BUSINESS SUBCONTRACTING PROGRAM (MAINTENANCE, REPAIR AND CONSTRUCTION) (MARCH 1964)**

(a) The Contractor agrees to establish and conduct a small business subcontracting program which will enable small business concerns to be considered fairly as subcontractors, including suppliers, under this contract. In this connection, the Contractor shall designate an individual to (i) maintain liaison with the Government on small business matters, and (ii) administer the Contractor's Small Business Subcontracting Program.

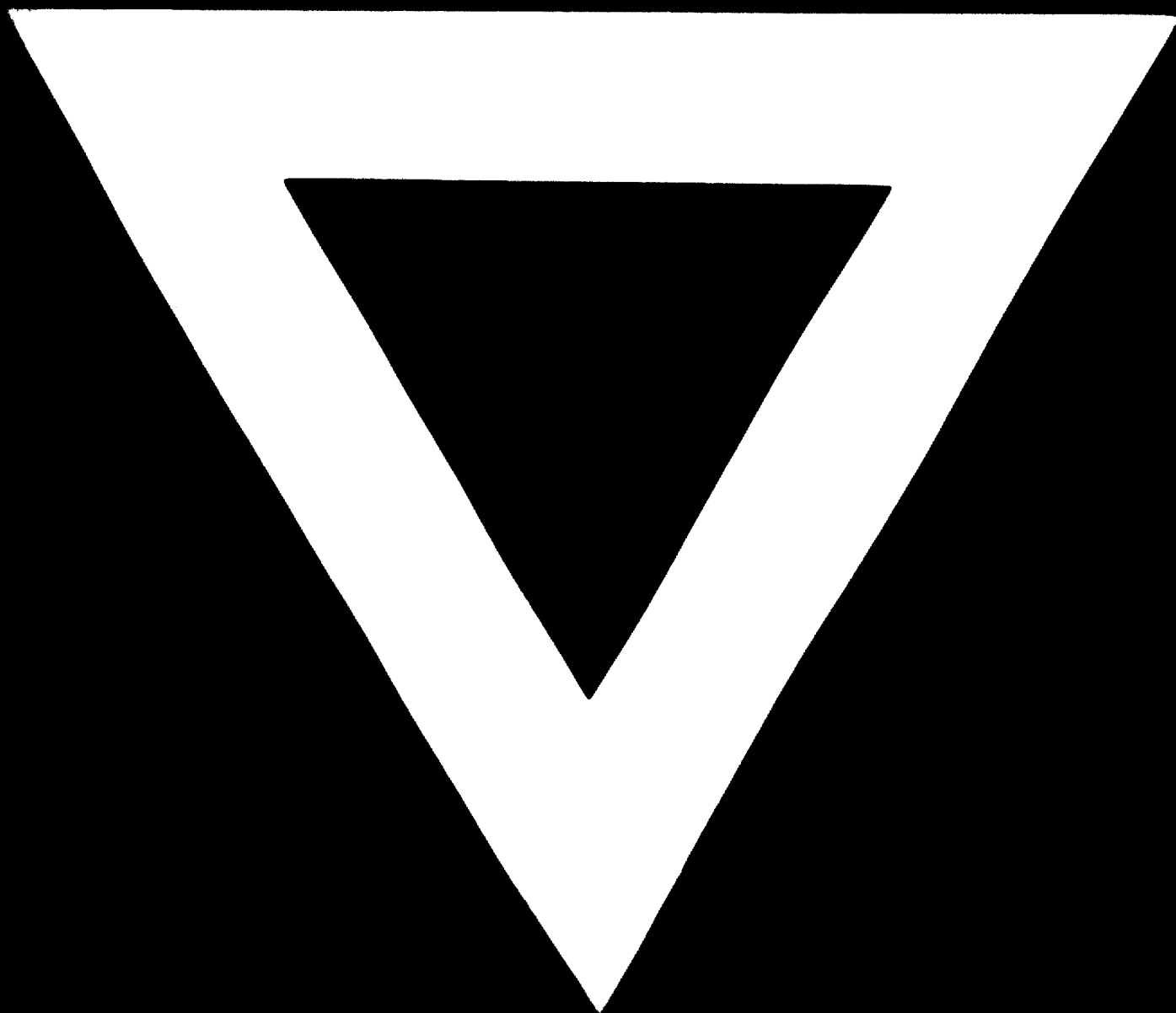
(b) Prior to completion of the contract and as soon as the final information is available, the Contractor shall submit a completed DD Form 1140-1 to the Government addressees prescribed thereon. This subparagraph (b) is not applicable if the Contractor is a small business concern.

(c) The Contractor further agrees (i) to insert the "Utilization of Small Business Concerns" clause in subcontracts which offer substantial subcontracting opportunities, and (ii) to insert in each subcontract exceeding \$500,000 a clause conforming substantially to the language of this clause except that subcontractors shall submit DD Form 1140-1 direct to the Government

addressees prescribed on the Form. The Contractor will notify the Contracting Officer of the name and address of each subcontractor that will be required to submit a report on DD Form 1140-1.

**1-707.6 Subcontracting Studies and Surveys.** Each purchasing activity shall assist the SBA to obtain such reasonably obtainable information and records concerning the subcontracting of its prime contractors and its subcontractors, having contracts that contain the Small Business Subcontracting Program clause, as the SBA may deem necessary. Accordingly, the contracting officer or his representative, separately, or together with a representative of SBA may periodically conduct studies and surveys of the contractor's subcontracting procedures and practices and those of his subcontractors. Such studies and surveys may originate with the purchasing activity in order to have available the pertinent data concerning subcontracting by its primes, or, if such data is not currently available, the studies and surveys may originate upon the request of the SBA for such data. On the basis of the foregoing studies, surveys, and records, the SBA may make recommendations to the purchasing activity regarding methods for increasing small business participation in subcontract awards. SBA and the purchasing activity will freely interchange, at the operating level, information resulting from these surveys.





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