date through 1951 at prices ranging from \$215.00 to \$302.78. During the period 28 June 1961 through 31 October 1961, four contracts and two options were awarded at unit prices ranging from \$130.00 to \$144.89. These awards were for Set Aside and Non-Set Aside procurements for labor surplus areas. All of these awards were subsequently terminated for default, or because of the use of surplus materials contrary to the terms of the contract. During the period 28 August 1963 to 16 July 1964, reprocurement of the above defaulted contracts was made under two competitively negotiated and formally advertised Small Business Set Aside solicitations. A Small Business firm in Philadelphia, Pennsylvania, was the successful contractor for all reprocurements at unit prices of \$182.00, \$193.00 and \$173.00.

As a result of the Southeast Asia buildup, four negotiated sole source procurements were awarded to the Philadelphia firm during the period 20 August 1965 through 28 December 1966. Increase options on two of these contracts were exercised within the same period. The negotiated prices were based on audits performed by Defense Contract Audit Agency and or U.S. Army Electronics Command, Philadelphia Procurement Division and in all cases involving sole source procurements prices were negotiated with the assistance of certificates

of current cost and pricing.

All of these sole source awards covered urgent priority procurements requiring earliest possible delivery. The contractor was actually in production throughout the time frame of these six awards. Previous experience had shown that he had met required delivery schedules and had submitted reasonable competitive prices. Award to the current producer entailed minimal administrative leadtime to contract award (one month) followed by four to six months production leadtime. Award to a new producer under formally advertised procedures would involve an administrative leadtime of three months to contract award, followed by 13 months production time. Thus, award to the active producer meant a procurement leadtime of five to seven months as opposed to 16 months with a new producer. Also inherent in a new award was the risk of a repetition of the unsatisfactory results as experienced with the earlier contractors. The decision to go sole source gave greatest assurance of early delivery as required by the priority Southeast Asia requirements. The increase in unit cost from \$182 to \$314.23 is largely reflected in material cost due to varying quantities and accelerated deliveries.

### NAVY PROCUREMENT OF AN/APX-72 TRANSPONDER

In late 1964 and early 1965, the Naval Research Laboratory (NRL), using its senior scientific and engineering personnel, built a hand-made laboratory model of the AN/APX-72 transponder. Many of the components incorporated in this

model were obtained from industry sources which had developed them.

It is not practicable to go immediately from such a model into production without extensive development. It was determined to go to industry for such development. In April 1965, following extensive industry-wide competition. Bendix received a contract award from NRL for \$58,000 (later increased to \$124,000) to develop production models of the AN/APX-72 that could be quantity produced as economically as possible. During this competitive solicitation, 11 companies submitted the best technical proposal and the lowest price.

In June 1966, pursuant to the authority of Title 10, U.S.C., Section 2304(a) (14), the Navy issued a letter contract to Bendix for the production of 2,310 AN/APX-72 transponder units. Bendix, the developer and sole producer of the AN/APX-72 transponder, was the only firm considered qualified to economically manufacture and deliver the required equipment within the time available. It is not uncommon to award first production contracts for relatively complex electronic units to the company which developed the equipment to assure that the development is in fact capable of being mass produced and to avoid the long delays inherent in training a new producer who is unfamiliar with the equipment.

training a new producer who is unfamiliar with the equipment.

In April 1967, under a leader-follower arrangement, Bendix was awarded a contract for 8,590 transponders—the FY 1967 requirement—with the proviso that 40% of these units must be subcontracted on a competitive basis to a "follower" company. The leader-follower arrangement, which is an "extraordinary" but well established procurement technique, is useful when it is necessary that all units of equipment in service be absolutely identical. In some fields, particularly complex electronics, it is virtually impossible to accomplish this

result simply by having a new producer follow drawings or specifications previously used by an earlier producer. By making the follower a subcontractor to the leader (Bendix) and holding the leader accountable for configuration control, variations in the equipments of the new producer can be eliminated or at least held to a minimum. It was originally considered highly desirable that these transponders be identical because it was felt that the resultant life-time savings in field maintenance, spare parts, and training costs would more than offset any likely small increase in acquisition costs.

The intention to award the leader-follower contract to Bendix was not publicized in advance because of the urgency of the procurement and the fact that award would have to be made to that company for reasons already explained above. However, the actual contract award to Bendix was publicized in the Commerce Business Daily with the intention to have a "follower" subcontractor

selected by Bendix on a competitive basis.

Contrary to Senator Dominick's statement, Bendix did not hand-pick the "follower". The Navy provided Bendix with the names of six qualified competitors to be solicited. Others came in as a result of the Navy-directed publicity in the U.S. Department of Commerce Business Daily. The Navy reviewed the procedures used by Bendix to ensure that competition was properly conducted. Twenty-seven responses were received as the result of publicizing this planned subcontract in the Commerce Business Daily. Of this total, 14 companies which appeared to meet the required qualifications were then requested by Bendix to submit management and technical proposals. Ten of the companies responded to this request. Six of these ten were considered technically qualified and were asked to submit price proposals. Four of these six were in an extremely close price range, and award was made to the low responsive and responsible offerer, Wilcox Electric Company, Inc.

It is true that Bendix gave the potential follower subcontractors a data package. However, this data package alone, without the technical guidance and know-how that Bendix was obligated to furnish under the leader-follower concept, was not adequate to permit production by a new source. We believe that the use of the leader-follower technique has resulted in a gain of at least six months in

getting a second source into production.

The Navy's original procurement plan did contain restrictive language as to the Navy's intent that its requirements for FY 1968 through FY 1970 would be solicited by the Government competitively between Bendix and the selected follower producer. This was based on the desire to achieve complete identicality

in all equipments.

Since the original procurement and maintenance plan were developed over a year ago, it has now been concluded that maintenance and spare parts stockage at the field level will not be undertaken at a level of detail below major modules of the complete equipment. Hence, while it is imperative that these modules be interchangeable performance-wise—the so-called form, fit, and function interchangeability—it is not necessary that the modules be absolutely identical internally.

This change in field maintenance planning appears to make it feasible to obtain an approved technical data package suitable for broad competitive procurement about March 1968. Hence, it is now likely that a significant portion of our future AN/APX-72 transponder requirements can be bought through unrestricted

competition.

(Responding to the testimony of Senator Dominick, the GAO subsequently supplied the following material:) (See p. 395.)

COMPTROLLER GENERAL OF THE UNITED STATES, Washington, D.C., December 26, 1967.

B-158193.

Hon, WILLIAM PROXMIRE, Chairman, Subcommittee on Economy in Government, Joint Economic Committee, Congress of the United States.

DEAR MR. CHAIRMAN: In response to your request made during the course of hearings before the Subcommittee on Economy in Government of the Joint Economic Committee, we have reviewed the testimony of Senator Peter H. Dominick on November 29, 1967, and we offer the following comments.

During the Senator's testimony, attention was focused on the increasing percentage of military procurements accomplished without recourse to the formal advertising procedures. In particular, four specific instances were cited by Senator Dominick as indicative of procurements manifesting a lack of effective competition. This theme was further emphasized by the Senator in statements on the floor of the Senate, and submitted to the committee for the record.

We considered some of the procurements mentioned by Senator Dominick under our bid protest procedures, and we are attaching for the record copies of those decisions. Although the decisions are self-explanatory, it should be noted that in these cases two factors were present which had a significant impact on our legal

review of the procurements.

First, our Office must accord a significant degree of finality to the contracting agency's determination in resolving the technical and scientific questions which arise during the negotiation process since we do not possess the in-house technical or engineering capability necessary to conduct an independent evaluation. This policy is illustrated in the protest of the Custom Packaging Company, B-160809, June 29, 1967, 46 Comp. Gen., pp. 885, 893, discussed by Senator Dominick. We believe that this policy represents the only practical avenue open to our Office in disposing of technical contentions advanced by unsuccessful offerors in the face of contrary advice from the procurement agency. Over the years, we have given consideration to the feasibility of employing various categories of technical personnel to assist us in reviewing technical and scientific determinations made by the procurement agencies both in bid protest cases and in audit reviews. However, the arguments against our Office establishing and maintaining an engineering review capability which could, in contested cases, result in an anomalous situation where our Office would be substituting its judgment for that of the contracting agencies have always seemed the most compelling. The significant and, we believe, prohibitory effects of such an arrangement would be the unnecessary diffusion of procurement responsibility and extended and possibly unreasonable delays in effecting procurements. Moreover, the resolution of the highly complex technical questions presented would necessitate the retention of a staff of experts in each of the many diverse areas of technical competence reflected in the broad spectrum of Government procurement.

The second feature common to the bid protests referred to by Senator Dominick is the fact that the contracts were negotiated under certain exceptions to the requirement for formal advertising authorized in section 2304(a) of title 10, United States Code. In each case the determination to negotiate under the exception used was one which, as a result of the provisions of 10 U.S.C. 2310, was final, and thus our Office lacked the authority to question the legality of the negotiated award. However, we found in the cases referred to by Senator Dominick that the determinations to negotiate the procurements were, in our opinion,

adequately justified and documented.

The Department of the Army's procurements of AN/PRC-25 and AN/PRC-77 radios are being reviewed by our audit staffs. At the request of Senator Dominick we initiated the audit of the Army procurements to determine whether any excess profits were realized. We expect to issue our report on these reviews in February 1968. Further, as you requested in the hearings on December 8, 1967, we are reviewing the AN/APX-72 transponder procurement by the Navy Department. Our study of this procurement has not developed to the extent that we may offer comments at this time. However, we expect to issue a report on or about March 15, 1968.

Sincerely yours,

FRANK H. WEITZEL,
Assistant Comptroller General of the United States.

#### [Enclosures]

COMPTROLLER GENERAL OF THE UNITED STATES, Washington, D.C., June 29, 1967.

B-160809. Mr. John E. Reilly, Attorney at Law, 2025 Western Federal Building, Denver, Colo.

DEAR MR. REILLY: Further reference is made to your telegram and letters dated February 1, 6, and March 22, 1967, protesting on behalf of the Custom Packaging Co.—a small business concern—against the award of a contract by

the Department of the Army to Nortronics, a Division of Northrop Corporation, under request for proposals No. DAAA15-67-R-0116, issued by the United States Army Edgewood Arsenal, Edgewood Arsenal, Maryland. Receipt is also acknowledged of your rebuttal letter on May 15, 1967, submitted in response to the report of the contracting officer.

The protest arises from an unsolicited proposal submitted by Custom to Edgewood Arsenal on April 15, 1966, covering the presentation of a shoulder borne, rapid fire rocket powered, fire flame delivering weapon. A film demonstration of the weapon was submitted with the unsolicited proposal. The cover letter of

the proposal contained the following statements:

"Inasmuch as the system contains several patentable features, we would appreciate having the information contained in our proposal treated as proprietary. We have taken the preliminary steps toward the protection of these features with our patent lawyer, but will await your suggestions relating to the continuance of that effort."

By letter dated May 11, 1966, Edgewood Arsenal acknowledged receipt of the

unsolicited proposal and advised Custom that:

"You should understand that the receipt and evaluation of your proposal by the Army does not imply a promise to pay, a recognition of novelty or originality or any relationship which might require the Government to pay for use of information to which it is otherwise lawfully entitled. However, you may be sure the Army has no intention of using any proposal in which you have property rights without proper compensation."

Pursuant to the request contained in the May 11 letter, Custom executed a

memorandum of understanding as follows:

"The undersigned acknowledges that this date he has, on behalf of (himself, or Custom Packaging Company) made a disclosure of an inventive proposal to the Department of the Army relating to A SHOULDER BORNE, ROCKET POWERED, FLAME DELIVERING WEAPON.

"It is understood that the Department of the Army has accepted the above proposal for the purpose of evaluating it and advising of any possible interest, provided that the acceptance to determine such interest does not, in itself, imply a promise to pay, a recognition of novelty or originality or a contractual relationship such as would render the Government liable to pay for any use of information in the proposal, to which it would otherwise lawfully be entitled."

Thereafter, on October 14, 1966, request for proposals No. DAAA15-67-R-0116

Thereafter, on October 14, 1966, request for proposals No. DAAA15-67-R-0116 was issued to 16 firms, including Custom, for quotations on the furnishing of research services incident to the design, development, test, evaluation and fabrication of a multi-shot portable flame weapon system. A statement of work acceptable flame weapon system.

companied the request and provided in part that:

#### "II. STATEMENT OF WORK

# "A. Phase I-Literature Search and Preliminary Design Concepts

"1. The Contractor shall review the technology and design of the M72 LAW and the 3.5 inch bazooka to assure maximum utilization of common components and compliance with common military and operational characteristics. In addition, the background information concerning the experimental test data which was generated under a Marine Corps program for determining the effectiveness of an encapsulated flame round will be furnished by the Government.

# "C. Phase III—Final Design and Fabrication of Government Items

"Upon approval of the Phase II test results and design, the Contractor shall manufacture twenty launchers and 2000 rounds (in clips, cylinders or magazine as appropriate) to be delivered to the Government F.O.B., Edgewood Arsenal, Maryland. These units will be made in accordance to the approved specifications and drawings, filled and fuzed."

# "VI. Level of Effort

"B.

"It is recognized that the Contractor may not be able to accomplish all the technical requirements and make delivery of all items covered by the technical

description of the work within the level of effort set out herein. The Contractor's obligation with respect to completion of the technical work, including fabrication of items, will be deemed complete upon expenditure of the level of effort set out above provided that the Contractor has performed the work in accordance with sound technical procedures and good work practice. Notwithstanding the above, the Contractor must keep all data current, complete and deliver all reports as required by the contract and comply with all other requirements of the contract."

Interested offerors were advised that a cost-reimbursement contract was anticipated and that the principal criteria that would be used in the evaluation of proposals would be (a) technical approach, (b) caliber of personnel, (c) background experience, (d) facilities available, and (e) proposed schedule. Nine proposals were received and evaluated by a Technical Evaluation Committee in accordance with the foregoing factors and weights agreed upon prior to evaluation rating. The weights assigned each of the criteria were: technical approach 40 percent; technical personnel 20 percent; applicable background experience 15 percent; facilities 15 percent; and schedule 10 percent. The proposal of Custom was rated lowest and the proposal of Nortronics, a Division of Northrop Corporation, received the highest rating. The lowest offer in the amount of \$168,000 was submitted by Custom and the other eight offers ranged from \$269,000 to \$404,000. Nortronics submitted an offer of \$387,000.

By telegram dated February 1, 1967, to the procurement agency, Custom protested against the possible award of a research and development contract to Nortronics. The bases for its protest were: (1) that such contract was based on a weapon that had been developed and satisfactorily demonstrated to the procuring installation by Custom prior to the issuance of the request for proposals; (2) that the weapon system developed by Custom contained proprietary information; (3) that the weapon system developed by Custom and as demonstrated to the procuring installation fulfilled the basic requirements of the request for proposals; and (4) that since the weapon system developed by Custom was a completed hardware item, it was inappropriate for the procuring installation to buy under a research and development type contract an item already in existence and sufficiently defined for procurement by formal advertising pro-

In view of the urgency of the South East Asia requirement for the flame weapon system, which bore Issue Priority Designator 0-2, the contracting officer requested and received approval to make an award prior to the resolution of the protest. On February 3, 1967, after a period of negotiation with the corporation, cost-plus-incentive-fee contract No. DAAA15-67-C-0343

awarded to Nortronics in the total estimated amount of \$353,300.

You allege that the request for proposals was based on Custom's independent research and findings which utilized the uniqueness of that company's ideas, all of which were disclosed to Edgewood Arsenal technical personnel by means of, and through its unsolicited proposal. Further, you contend that Custom's proprietary rights in such disclosed information were violated by the issuance of the request for proposals. Therefore, you request that we direct the Department of the Army to cancel the award made to Nortronics and to direct an award to Custom, or, in the alternative, that the procuring activity should first negotiate with Custom to obtain unlimited rights to the data contained in the unsolicited proposal before proceeding further pursuant to Defense Procurement Circular No. 24 dated February 26, 1965 (Armed Services Procurement Regulation (ASPR) 9-202). However, upon review of the entire record before us, we find no legal or factual basis to question the award of the contract to Nortronics.

Your claim of improper use by the procuring activity of proprietary information contained in Custom's unsolicited proposal is categorically denied by responsible and knowledgeable technical personnel of the Department of the Army. And while your rebuttal and other correspondence dealing with this allegation strongly dispute the conclusion reached by the Army technical personnel, we have no alternative but to accept the facts as reported by the Army. In factual disputes, such as here, which are technically beyond the competence of our Office because of the scientific or engineering concepts involved, we must accord a significant degree of finality to the administrative position. Hence, without questioning the actual character of the claimed proprietary information, we believe that this aspect of the protest properly may be resolved on grounds other than those involving the resolution of disputed technical facts.

We note that the request for proposals was issued on October 14, 1966, and that proposals thereunder were to be submitted by November 18, 1966, or about 6 months after Custom had submitted its unsolicited proposal to Edgewood Arsenal. Custom had ample opportunity to study the request for proposals before it responded thereto but it took no exception in its proposal or otherwise with respect to the alleged inclusion of its "proprietary" information. There is no indication of any protest by Custom until it appeared that it was an unsuccessful offeror. The courts have taken the position that a party to maintain his proprietary rights in information must take reasonable action to prevent or suppress its unauthorized use. See, for example, Ferroline Corp. v. General Aniline & Film Corp., 207 F. 2d 912, 914; Globe Ticket Co. v. International Ticket Co., 104 A. 2d 92. Here, Custom made no attempt subsequent to issuance of the request for proposals to protest against the allegedly improper disclosure until it became aware of the fact that it was not being considered for award. In this posture of the matter, coupled with the administrative denial of disclosure, we must conclude that no substantial basis exists for questioning the actions of the procurement agency in this regard. See B-149295, September 6, 1962; B-153144, June 4, 1964; B-154038, August 4, 1964; B-154818, November 16, 1964.

Pursuant to the negotiation authority in 10 U.S.C. 2304(a) (11), paragraph 3-211 of ASPR authorizes negotiation of contracts for property or services

Pursuant to the negotiation authority in 10 U.S.C. 2304(a) (11), paragraph 3-211 of ASPR authorizes negotiation of contracts for property or services that the Secretary of the Department determines to be for experimental, developmental or research work, or for making or furnishing property for experiment, test, development or research. This authority to negotiate such contracts is

applicable in the following circumstances listed in ASPR 3-211.2:

"(i) Contracts relating to theoretical analysis, exploratory studies and experi-

ment in any field of science or technology;

"(ii) Developmental contracts calling for the practical application of investi-

gative findings and theories of a scientific or technical nature;
"(iii) Contracts for such quantities and kinds of equipment, supplies, parts, accessories, or patent rights thereto, and drawings or designs thereof, as are necessary for experiment, development, research, or test; or

"(iv) Contracts for services, tests, and reports necessary or incidental to ex-

perimental, developmental, or research work."

It seems clear from the documented record that the technical nature of this procurement was such that two-step formal advertising under ASPR 2-501 et seq. was neither feasible nor practicable. Since "development" was involved, the exact nature and extent of the proposed work and the precise method of accomplishing the same could not be established in advance. Moreover, the work contemplated was subject to improvisation and change based on the offeror's approach prior to the establishment of firm contract requirements. It will be noted from a reading of the two-step formal advertising procedures that the "development" work involved here was not amenable to those procedures. Cf. ASPR 4-104. The procurement was, however, on a competitive basis to the maximum practical extent. As indicated above, proposals were requested from 16 sources and 9 firms responded. All offers which were determined to be technically acceptable were evaluated under the established criteria on a common basis. Aside from this the determination to negotiate this contract under 10 U.S.C. 2304(a) (11) is final as a matter of law under 10 U.S.C. 2310(b). While the request for proposals and the contract called for the furnishing of 20 weapons and 2,000 rounds of ammunition for test purposes, the procurement was primarily for research and development under the regulations referred to above.

You contend that negotiations should have been conducted with Custom in accordance with ASPR 3-805.1(a) which provides, with certain stated exceptions, that after receipt of initial proposals, written or oral discussions shall be conducted with all responsible offerors who submit proposals within a competitive range, price and other factor considered. However, ASPR 3-805.1(d) provides with reference to the negotiation of research and development contracts that:

"(d) The procedures set forth in (a) \* \* \* above may not be applicable in appropriate cases when special services (such as architect-engineer services) or when cost-reimbursement type contracting is anticipated. Moreover award of such contract and R&D contracts may be properly influenced by the proposal which promises the greatest value to the Government in terms of possible performance, technical quality, ultimate producibility, growth potential and other factors rather than the proposals offering the lowest price or probable cost and fixed fee."

The negotiation procedures followed here were generally in accordance with section IV, and part 2, ASPR, which is concerned with the procurement of research and development services pursuant to the negotiation authority of 10 U.S.C. 2304(a) (11) The portion registers of section 110 authority of 10

U.S.C. 2304(a) (11). The pertinent provisions of section IV are as follows:

"4-106.3. Conduct of Negotiations.—See 3-804 and 3-805. The contracting officer should make certain that each prospective contractor fully understands the details of the various phases of the Government's requirement, especially the statement of work. This may be best accomplished by conferences between a prospective contractor, the contracting officer, and appropriate technical personnel, particularly where there is doubt that a work statement is understood or will be interpreted correctly by prospective contractors.

"4-106.4. Evaluation for Award.-

"(a) Generally, research and development contracts should be awarded to those organizations, including educational organizations, which have the highest competence in the specific field of science or technology involved. However, awards should not be made for researh or development capabilities that exceed those needed for the successful performance of the work.

"(b) Before determining the technical competence of prospective contractors, and recommending to the contracting officer the concern or concerns that they consider most technically competent, cognizant technical personnel shall consider

the following:

"(i) the contractor's understanding of the scope of the work as shown

by the scientific or technical approach proposed;

"(ii) availability and competence of experienced engineering, scientific, or other technical personnel;

"(iii) availability, from any source, of necessary research, test, and production facilities:

"(iv) experience or pertinent novel ideas in the specific branch of science

or technology involved; and

"(v) the contractor's willingness to devote his resources to the proposed

work with appropriate diligence.

"(c) In determining to whom the contract shall be awarded, the contracting officer shall consider not only technical competence, but also all other pertinent factors including management capabilities, cost controls including the nature and effectiveness of any cost reduction program (see 3-101(viii)), and past performance in adhering to contract requirements, weighing each factor in accordance with the requirements of the particular procurement (see 1-903). \* \* \*

"4-106.5 Evaluation of Price and Costs.-

"(a) While cost or price should not be the controlling factor in selecting a contractor for a research or development contract, cost or price should not be disregarded in the choice of the contractor. It is important to evaluate a proposed contractor's cost or price estimate, not only to determine whether the estimate is reasonable, but also to determine his understanding of the project and ability to organize and perform the contract. \* \* \*"

Although Custom demonstrated its portable flame weapon system for Edgewood Arsenal, the record shows that such demonstration was not successful and that, in the considered judgment of technical personnel, such weapon did not meet the needs of the Government. We find nothing in the record which would lead to the conclusion that Custom had a valid basis for assuming that the Government would award it a contract for such weapon. In regard to Custom's unsolicited proposal, ASPR 4-106.1(e) (5) provides that the submitter of an unsolicited proposal is not necessarily entitled to preferential treatment in the award of any contract because of his submission. Moreover, and in view of the reported deficiencies in the weapons system proposed in the unsolicited proposal, it would seem that any expectation of preferential treatment was dissipated when the request for proposals was issued.

In regard to the failure of the procuring activity to insert in the request for proposals a notice that an award may be made without discussion of the proposals (ASPR 3-805.1(a)(v)), the contracting officer has advised that it was intended that discussions would be held with other offerors but that after receiving the proposal of Nortronics, it was determined that no benefit would accrue to the Government by conducting discussions with offerors rated significantly lower than Nortronics. Considering the objective of research and development procure-

ment and the correlative responsibility of Edgewood Arsenal to maintain scientific and technological superiority requisite to promote and advance the effectiveness of military operations (ASPR 4-102), we believe on the basis of the record before us that the procurement responsibility was properly discharged in making the award to Nortronics. ASPR 3-805.1(a) which prescribes the negotiation procedures to be applied in the selection of offierors for negotiation and award is an implementation of 10 U.S.C. 2304(g). That provision of law reads as follows:

"(g) In all negotiated procurements in excess of \$2,500 in which rates or prices are not fixed by law or regulation and in which time of delivery will permit, proposals shall be solicited from the maximum number of qualified sources consistent with the nature and requirements of the supplies or services to be procured, and written or oral discussions shall be conducted with all responsibile offerors who submit proposals within a competitive range, price, and other factors considered. \* \* \*"

A study of the record on this procurement as supplemented by presentations on behalf of Custom leads to the conclusions that the award as made represented a proper discharge or procurement responsibility and discretion as to which we

find no legal basis to question.

Although other contentions relating to this procurement have been advanced, they relate mainly to procurement administration involving judgment determinations as to which we have no comments to offer. See B-158842, March 30, 1966. Your protest is therefore denied.

The film submitted by Custom in support of its protest is returned.

Very truly yours,

FRANK H. WEITZEL,
Assistant Comptroller General of the United States.

COMPTROLLER GENERAL OF THE UNITED STATES, Washington, D.C., June 29, 1967.

B-160809.

Hon. Bernard L. Boutin, Administrator, Small Business Administration.

DEAR MR. BOUTIN: Reference is made to a letter dated June 2, 1967, from your General Counsel, commenting on the administrative report concerning the protest of the Custom Packaging Co. against the award of a negotiated research and development contract to Nortronics, a Division of Northrop Corporation, pursuant to request for proposals No. DAAA15-67-R-0116, issued by the United States Army Edgewood Arsenal for the design, development and manufacture of a multishot portable flame weapon system.

Enclosed is a copy of our decision of today to the company's attorney denying

the protest.

In his letter, your General Counsel states that the record does not indicate that the contracting officer determined that the proposal submitted by Custom was technically nonresponsive; that since the contracting officer has stated that he conducted negotiations solely with Nortronics because its proposal was superior to all others received, there is an implication that Custom's proposal was inferior to that of Nortronics and that if this is so, this may go to the responsibility of Custom to perform the procurement. Your General Counsel requests that our Office determine whether the contracting officer should have referred the question of the responsibility of Custom to perform the procurement to the Small Business Administration for determination under the certificate of competency procedures.

By enactment of section 8(b) (7) of the Small Business Act, 15 U.S.C. 637(b) (7), the Congress has limited the authority of administrative officers to make final determinations of responsibility of small business bidders by providing that where a small business concern is certified by SBA to be a competent Government contractor with respect to capacity and credit, the procuring officers of the Government must accept such certification as conclusive. However, this limitation on the administrative authority relates only to determinations of "capacity and credit." In this connection, Armed Services Procurement Regulation (ASPR) 1-705.4(c), in recognition of the SBA authority, contemplates the referral to SBA of only bids or proposals of small business concerns which contracting officers propose to reject solely for the reason that the bidders or offerors have been

found to be nonresponsible as to capacity and credit. In the instant case, however, it appears that the proposal of Custom would not meet the urgent military requirements of the Army. The technical evaluation of Custom's proposal was reported to us as follows:

"This company proposes to improve the basic weapon which was demonstrated at Edgewood Arsenal in February 1966. The one piece launcher and stock is too long; when the magazine is attached the weapon takes on a bulky appearance. The performance of the unit is not supported by any data and the described characteristics are probably the subjective judgment of the promoters.

"Most of the approach and scope repeat the information that is in the RFP. The use of a non-standard rocket motor would present serious delays in the manfiring program. No alternative designs are given. There are no calculations to

support the proposed design."

Moreover, although not referred to in the administrative report, there is for

consideration ASPR 1-705.4(b) which reads in part:

"In procurement where the highest competence obtainable or the best scientific approach is needed, as in certain negotiated procurement of research and development, highly complex equipment, or personal or professional services, the certificate of competency procedure is not applicable to the selection of the source offering the highest competence obtainable or best scientific approach. However, if a small business concern has been selected on the basis of the highest competence obtainable or best scientific approach and, prior to award, the contracting officer determines that the concern is not responsible because of lack of capacity or credit, the certificate of competency procedure is applicable."

On the basis of the record before us, we are of the view that Custom's proposal was technically nonresponsive to the Army's requirements as detailed in the statement of work accompanying the request for proposals. In reaching this view, we are aware that some of Custom's deficiencies disclosed in the technical evaluation related to its capacity and credit. However, Custom received only a rating of 2 on its technical approach to the Government's requirements out of a possible weighted factor of 40. We feel that this reasonably demonstrates that the failure of Custom to be considered for negotiation was due to its deficiencies in the area of compliance with the Government's expressed requirements.

Sincerely yours,

FRANK H. WEITZEL, Assistant Comptroller General of the United States.

COMPTROLLER GENERAL OF THE UNITED STATES, Washington, D.C., September 14, 1967.

B-160809.

Hon, John L. McClellan. Chairman, Senate Permanent Subcommittee on Investigations, Committee on Government Operations, U.S. Senate.

DEAR MR. CHAIRMAN: Reference is made to your letter of August 15, 1967, referring to certain information your subcommittee developed with regard to the \$167,608 fixed-price proposal of the Custom Packaging Co. under request for proposals DAAA-15-67-R-0116, issued by the United States Army Edgewood Arsenal, which was passed over in favor of a Northrop Nortronics \$387,000 cost-

within the context of 10 U.S.C. 2304(g) and the implementation in ASPR 3-805.1.

This matter was the subject of two decisions (B-160809) of June 29, 1967; one to the attorney for Custom Packaging Co. and the other to the Administrator of the Small Business Administration. The former decision stated that considering the objective of research and development procurement and the correlative responsibility of Edgewood Arsenal to maintain scientific and technological superiority requisite to promote and advance the effectiveness of military operations, our Office believed that, on the basis of the record before it, the award made to Nortronics represented a proper discharge of procurement responsibility and discretion and was not subject to question by our Office. The latter decision held that since the contracting officer did not reject the Custom Packaging proposal for lack of responsibility, the matter was not required to be submitted to the Small Business Administration for consideration under the certificate of competency procedures. A copy of each of the decisions is enclosed for your

information.

The information reported to have been developed by the subcommittee is that the request for proposals divulged to industry at large on exclusive invention developed by Custom Packaging; that the engineering effort proposed by Custom Packaging approximated the engineering requirement estimated by the contract review panel; that the lower Custom Packaging proposal is due largely to low labor and overhead rates, and that Custom Packaging apparently offered a performance bond guaranteeing delivery at its offered fixed price.

As indicated in the decision to the attorney for Custom Packaging, the determination whether Edgewood Arsenal incorporated in the request for proposals proprietary information disclosed by Custom Packaging on its previous unsolicited proposal was technically beyond the competence of our Office because of the scientific engineering concepts involved. With respect to the statement that the engineering effort proposed by Custom Packaging approximated the engineering requirement estimated by the contract review panel, as we noted in the decision to the Small Business Administration, the proposal evaluation committee found the Custom Packaging proposal to be largely repetitious of the information in the request for proposals and it was not supported by performance data or calculations confirming the proposed design. While it is true that Custom Packaging did use in its price proposal lower labor and overhead rates than were utilized by Nortronics in its proposal, the Nortronics price proposal was increased by the fact that it estimated substantially more man-hours for the effort than were estimated by Custom Packaging.

The record furnished our Office by the Department of the Army in connection with the June 29 decisions does not show that Custom Packaging proposed to offer the Government a performance bond. However, even if such a tender was made, it would have been of questionable value, since, while such a bond would have provided some protection to the Government, it would not have insured the development of the weapon within the desired time frame. Of course, Edgewood Arsenal had no assurance that Nortronics would develop the weapon within the allotted time, but from the evaluation of its proposal, administrative personnel believed that there was a greater probability of successful development in the approach offered in the Nortronics proposal. In that connection, the Nortronics proposal was rated on a weighted basis by the proposal evaluation committee at an 865 total, whereas Custom Packaging was rated lowest of all nine proposals

at a total weighted rate of 250.

With respect to negotiations, 10 U.S.C. 2304(g) provides:

"In all negotiated procurements in excess of \$2,500 in which rates or prices are not fixed by law or regulation and in which time of delivery will permit, proposals shall be solicited from the maximum number of qualified sources consistent with the nature and requirements of the supplies or services to be procured, and written or oral discussions shall be conducted with all responsible offerors who submit proposals within a competitive range, price, and other factors considered: Provided, however, That the requirements of this subsection with respect to written or oral discussions need not be applied to procurements in implementation of authorized setaside programs or to procurements where it can be clearly demonstrated from the existence of adequate competition or accurate prior cost experience with the product, that acceptance of an initial proposal without discussion would result in fair and reasonable prices and where the request for proposals notifies all offerors of the possibility that award may be made without discussion."

ASPR 3-805.1 which prescribes the negotiation procedure to be followed in the selection of offerors for negotiation and award is an implementation of that statutory provision. While ASPR 3-805.1(a) provides that after receipt of initial proposals, written or oral discussions shall be conducted with all responsible offerors who submit proposals within a competitive range, price and other factors considered, ASPR 3-805.1(d) provides that the procedures set out in ASPR 3-805.1 (a) may not be applicable in appropriate cases and that research and development contracts may be properly influenced by the proposal which promises the greatest value to the Government in terms of possible performance, technical quality, ultimate productibility, growth potential and other factors rather than

the proposals offering the lowest price or probable cost and fixed fee.

In decision B-161483, July 14, 1967, 47 Comp. Gen., p. 29, referenced in your letter, our Office held that the failure of a low proponent to pass a benchmark test should not have automatically precluded the proponent from discussions to determine whether the proposal which otherwise met requirements could be improved to meet the benchmark requirements. Unlike the referenced situation, the immediate case involved a proposal for a research and development contract. While our Office has held that the statutory and regulatory requirement for negotiations with all responsible offerors who submit competitive offers is equally applicable where a research and development contract is contemplated (B-158686, September 2, 1966, to the Secretary of the Army), the contracting officer advised us that the Custom Packaging proposal was not considered to be within a competitive range because it was imperative to utilize the highest technical competence available to the Government for the development of a weapon urgently needed for combat

purposes.

In this context, Custom Packaging's proposal ranked last of the nine proposals received and was ranked very low as indicated by the spread in the weighted rates shown above. Moreover, Custom Packaging received a weighted rating of 80 out of a possible rating of 400 on technical approach. In the June 29 decision to the Small Business Administration, we stated that the company received a rating of two on the technical approach out of a possible weighted factor of 40. However, two—a rating of "poor"—was weighted by a factor of 40 extended to a weighted rating of 80. Ten, which was the rating of "excellent-superior," was the highest unit score attainable and would be projected out to a weighted rating of 400. Thus, even if through discussions with Custom Packaging, the weighted rating on the technical approach could have been brought up to 400, the total score would have only been 570, or almost 300 less than the total weighted score Nortronics received. Thus, it is not apparent how any benefit could have accrued to the Government by conducting discussions with Custom Packaging in view of the heavy emphasis placed upon the technical approach by the administrative office. In addition to being rated "poor" by the proposal evaluation committee on technical approach, the Custom Packaging proposal was also rated "poor" by the committee on technical personnel, background experience and facilities.

Although Custom Packaging was within a competitive range pricewise, both 10 U.S.C. 2304(g) and ASPR 3-805.1(a) require discussions with offerors who submit proposals within a competitive range, price and other factors considered. The term "other factors" has been held to include the technical acceptability of proposals. B-159540, January 11, 1967. Thus, whether a proposal is within a competitive range is not limited to an appraisal of price alone. As demonstrated above, the Custom Packaging proposal was so technically deficient that it was believed that discussions with the company could not bring it up to an acceptable level. We therefore are unable to conclude on the record before us that the proposal was within a competitive technical range that would have required discussions pursuant to the law and regulations. In this connection, as noted above and in our June 29 decisions, the procurement regulations provide that in selecting a contractor for research and development, the award of the contract can be influenced by the proposal demonstrating the highest competence and best scientific approach rather than the lowest price.

We trust the foregoing serves the purposes of your request.

Sincerely yours,

Acting Comptroller General of the United States.

COMPTROLLER GENERAL OF THE UNITED STATES, Washington, D.C., June 1, 1967.

B-161031.

Mr. STANLEY A. REVZIN, Vice President, Bristol Electronics, Inc., New Bedford, Mass.

Dear Mr. Revzin: Reference is made to your telegram and letter of March 9 and 16, 1967, respectively, protesting against the action of the Army Electronics Command in restricting a procurement for AN/PRC-77 radio sets under request for proposals PIIN DAABO5-67-R-1176 to the Radio Corporation of America (RCA) on a sole-source basis primarily because the AN/PRC-77 radio set is an improved version of the AN/PRC-25 radio set which your company is manufacturing under a contract awarded after a formal advertisement for bids.

The Army Electronics Command contracting officer has advised us that improvements to the AN/PRC-25 radio were necessary to assure compatibility with a radio frequency amplifier which would extend the range of the radio. Although the amplifier would have the desirable effect of intensifying the output signal, it would also have the undesirable effect of intensifying unwanted signals. A product improvement program was initiated by the Army Electronics Command to meet the problem and also to improve reliability and logistic support by a complete solid-state design and elimination of the electron tube R-F output amplifier.

On March 31, 1965, RCA was awarded a contract for the reengineering and modification of 12 AN/PRC-25 sets. The contract was modified January 17, 1966, to provide for interface facilities with classified equipment. This new requirement was considered to affect interchangeability of the basic radio. As a result, a new designation, AN/PRC-77, was assigned to the modified AN/PRC-25. The contract was modified again on April 29, 1966, for other services on an addi-

tional quantity in connection with the classified program.

The differences between the AN/PRC-25 and the AN/PRC-77 radios are

summarized by the contracting officer as follows:

"Externally, the AN/PRC-25 and AN/PRC-77 radios are identical in appearance with identical panel controls and equipment cases. However, the AN/PRC-77 in addition to the functional capabilities of the AN/PRC-25, has significant advantages over the AN/PRC-25 for operation with R-F amplifier AM-4306 and with classified equipment. The AN/PRC-77 is of complete solid-state design whereas the AN/PRC-25 utilizes one electron tube as the output R-F power amplifier. The elimination of the electron tube permitted use of the existing front panel power connector for interface connection with the classified equipment. The solid-state design also permitted the elimination of the AN/PRC-25 power converter. Receiver R-F amplifier and squelch circuitry of AN/PRC-77 provide substantial improvement over the original AN/PRC-25 design:

"(1) The receiver is less vulnerable to desensitization in the presence of

high-energy R-F fields.

"(2) Re-transmission operation has been substantially improved.

"(3) Wide band output circuitry has been added to accommodate interface with classified equipment.

"In the transmitter portion of the AN/PRC-77, the original AN/PRC-25 frequency control and modulation schemes were re-designed. Notably, the side-step

oscillator, a major source of signal interference was eliminated.

"Reduced spurious radiations has resulted in a significantly larger number of available operating channels when operating with other radios. Modulator circuitry was also added, again to accommodate interface requirements with classified equipment. Of the twenty-five (25) electronic modules originally used in both the transmitter and receiver portions of the AN/PRC-25, only eight (8) of the modules used in the AN/PRC-77 are interchangeable with the AN/PRC-25."

Concerning the differences in the radios and the utility of the improvements,

the contracting officer has advised:

"(1) Complete solid state design of the AN/PRC-77 permitted removal of the power converter and use of the existing front panel power connector for interface connection with classified equipment. In replacement of the electron tube power amplified additional R-F driver stages were required. Accordingly, two (2) additional sections were added to the variable tuning capacitor. Maximum R-F power output was increased from 1.0 watts to 1.5 watts in the high-frequency band and from 1.5 watts to 2 watts in the low-frequency band. Input power was reduced approximately ½ of that required by the AN/PRC-25, increasing battery life correspondingly. Weight was reduced by approximately ½ lb.

"(2) Transmitter frequency control generation and modulation schemes were re-designed, reducing the number and amplitude of spurious radiations. This has resulted in substantial reduced radio-frequency interference when operating with other radios. Previously, frequency assignments in which the radio could operate had to be spaced sufficiently far enough apart to assure that one radio operating on a given frequency would not interfere with a second radio located near by but operating on a separate frequency. The redesign of the radio had the effect of drastically reducing the frequency separations previously required. The additional frequency assignments now available in re-transmission operation are of particular importance since it offers greater selectivity to the Commander in a tactical situation in his choice of channels of communication and elimina-

tion of overcrowded conditions on the limited channels then available. Operation with R-F amplifier AM-4306 is improved accordingly with reduction of

mutual interference.

"(3) Receiver radio-frequency circuitry was re-designed to improve desensitization characteristics when operating in the vicinity of high-energy RF fields. The improvement in this area again increases the number of available frequency assignments when operating with other radios. Squelch circuitry was also redesigned to increase sensitivity and to provide improved re-transmission operation. Wide band amplifier and interlock circuitry was also added to accommodate an interface with classified equipment."

It is indicated further that because of the electrical and mechanical changes to the modules and main chassis of the AN/PRC-25 radio, tooling or gauging for the AN/PRC-25 could not be used in producing the AN/PRC-77 and phasing into an existing AN/PRC-25 production line would not be possible at the present

time.

The AN/PRC-77 radio was approved for limited production by the Office of the Chief of Research and Development, Department of the Army, in June 1966 after eight AN/PRC-77 prototypes were tested in-plant and in the field. The tests demonstrated that the radio met the requirements for reduced spurious responses and radiations, improved receiver performance when exposed to high level R-F field radiation and compatibility with classified equipment while maintaining the ruggedness of the AN/PRC-25. The testing is summarized as follows:

"(1) Complete electrical testing under room environment.

"(2) Mechanical testing including vibration, bounce, and shock tests.
"(3) Environmental testing including heat, cold, and humidity tests.

"(4) Radio frequency interference tests.

"(5) Field testing including communication range tests.

"(6) Re-transmission testing.

"(7) System testing with classified equipment."

Following the approval of the Department of the Army for an initial limited production of AN/PRC-77 radios, the first production contract was placed with RCA on June 29, 1966. There was an immediate and urgent Southeast Asia requirement for the radios and the requirement was assigned an 02 priority designator. As a result, the contract was negotiated under the authority of 10 U.S.C. 2304(a) (2) and ASPR 3-202.2(vi). The statute authorizes contracts to be negotiated if the public exigency will not permit delay incident to advertising. ASPR 3-202.2(vi) permits utilization of this authority when a purchase request cites an issue priority designator 1 through 6. The negotiation was restricted to RCA because procurement data was not available for competition and the company as the designer of the radio was believed to be the only source capable of furnishing the sets starting in March 1967 with completion by September 1967.

Drawings and data from this first production contract are not expected to be delivered to the Government until late 1967. The contracting officer has stated that until such time as the production design has been verified by first article testing, proven out in production, and production drawings released, the Army is not in a position to provide technical data for competition. In the absence of competitive procurement data and in view of the continued priority for the equipment, subsequent production contracts also have been placed with RCA as the only known source capable of furnishing the radio within the required time frame under the authority of 10 U.S.C. 2304(a) (2) and ASPR 3-202.2(vi), cited above. The contracts, the last of which was awarded on April 28, 1967, under request for proposals PIIN DAAB05-67-R-1176, cover production through May 1969 and these contracts had the advance approval of the Department of the Army which had extended the initial June 1966 approval for limited production in October and December 1966.

The contracting officer has further advised that, based upon current expectations of the receipt of drawings and data from the production contractor, it is anticipated that a technical data package adequate for competition will be available late this year. At that time, an advertisement of competitive bidding on a 3-year multiyear procurement is contemplated. While a competitive procurement is planned toward the end of the year, it is indicated that procurement leadtime of 20 months will have to be provided to accommodate new suppliers and this will result in initial delivery about August 1969, whereas delivery of the last procurement is required starting in February 1968. It is indicated that if the

last procurement was postponed until the article could be let to competition, there would be an 18-month delay in initial delivery which was not considered justified in view of the priority for the radios.

The increase in costs of AN/PRC-77 radio sets over AN/PRC-25 radio sets

is justified by the Army Electronics Command based on the following considera-

tions:

"(a) The AN/PRC-77 Radio Set contains more (and more highly complex)

components than the AN/PRC-25 Radio Set.

"(b) The AN/PRC-77 equipment contains new components and significant changes to existing components both of which result in more complex circuitry

and changed or new test specifications.

"(c) The new (or changed) components are being produced on a first-time basis which results in additional start-up costs and higher production costs (e.g. new tooling, new test equipment, plant rearrangement, additional production and other engineering costs as well as increases in material and factory labor costs)."

The contracting officer recognizes that RCA has a competitive advantage since it is the sole producer of the AN/PRC-77 radio sets. However, he emphasizes that such advantage is due strictly to the circumstances which have been

set forth above.

As indicated above, the procurements for the AN/PRC-77 radio sets were negotiated under the authority of 10 U.S.C. 2304(a)(2). Section 2310(b) of title 10, United States Code, specifically provides that administrative decisions to negotiate under 10 U.S.C. 2304(a)(2) are "final." Therefore, no legal basis exists to object to the subject procurements. However, in view of the representations made by the procurement agency it would appear that AN/PRC-77 radio sets will be procured by the end of this year under competitive procedures.

Very truly yours,

FRANK H. WEITZEL. Assistant Comptroller General of the United States.

COMPTROLLER GENERAL OF THE UNITED STATES. Washington, D.C., December 7, 1967.

B-161031

Mr. H. T. STARKAND, President, Decitron Electronics Corp., Brooklyn, N.Y.

DEAR MR. STARKAND: Reference is made to your letter of August 30, 1967. protesting the August 16, 1967, modification of contract DAABO5-67-C-0170(E) with Radio Corporation of America (RCA), Camden, on the basis that the United States Army Electronics Command has on record a March 7, 1967, bid from your company lower than the modification price and that the modification cannot be justified on the grounds that there is an urgent requirement for the radio sets being procured or that there is a lack of data which would permit competition,

Contract DAABO5-67-C-0170(E) is a 2-year multi-year procurement for AN/RC-77( ) radio sets awarded on April 28, 1967, to RCA, the equipment developer and sole current producer, on the basis that there was no procurement data available for competition and that the company as the developer of the radio was the only known source capable of furnishing the sets within the required time frame. The contract was awarded under the authority of 10 U.S.C. 2304(a) (2) and paragraph 3-202,2(vi) of the Armed Services Procurement Regulation (ASPR). The statute authorizes contracts to be negotiated if the public exigency will not permit delay incident to advertising. ASPR 3-202.2(vi) permits utilization of this authority when a purchase request cites an issue priority designator 1 through 6. The first-year requirement was assigned an 06 designator and the second year an 02 designator. Section 2310(b) of title 10. United States Code, specifically provides that administrative decisions to negotiate under 10 U.S.C. 2304(a)(2) are final. See B-161031, June 1, 1967, regarding the same procurement. Therefore, no legal basis exists to object to the "urgency" determination.

The August 16, 1967, modification of contract DAABO5-67-C-0170(E) did not provide for any more units than were contemplated by the contract. It merely

represents the second-year increment which was included in the original multiyear quantities and total contract price. Any understanding that the modification added quantities over the original contract quantities may have arisen from incomplete information published in the Commerce Business Daily with respect to the modification.

With respect to the lack of competitive procurement data, the contracting officer has advised that RCA did not deliver drawings suitable for processing for a data package for competitive procurement until September 1, 1967. Further, he has indicated that if the second-year requirement was postponed until the article could be let to competition, there would be a delay in initial delivery which was not considered justified in view of the priority for the radios.

In view of the foregoing, your protest is denied.

Very truly yours,

FRANK H. WEITZEL. Assistant Comptroller General of the United States.

# APPENDIX 12

## SPECIAL QUESTIONS AND ANSWERS

December 12, 1967.

Hon. Elmer B. Staats, Comptroller General of the United States, Washington, D.C.

DEAR MR. STAATS: At hearings of the Subcommittee on Economy in Government on December 8, 1967, members were granted permission to submit additional questions to witnesses with the replies thereto to be included in the record of the hearings.

This question has been referred to you:

"GAO stated that contractors are required by OEP regulation to obtain advance approval to use Government-owned machine tools on commercial work exceeding 25% of the total usage.

"Does this apply to equipment purchased from DOD and other funds besides

Defense Production Act funds?

"In either case, what approvals and denials were made by the OEP to what companies, for what amount of equipment?"

Your reply will be appreciated as soon as possible but not later than December 21, 1967.

Sincerely.

WILLIAM PROXMIRE, Chairman.

COMPTROLLER GENERAL OF THE UNITED STATES, Washington, D.C., December 21, 1967.

B-140389.

Hon. WILLIAM PROXMIRE, Chairman, Joint Economic Committee, Congress of the United States.

DEAR MR. CHAIRMAN: Reference is made to your letter of December 12, 1967, asking us to reply to the two questions raised by members of your Subcommittee on Economy in Government concerning the requirement established by the Office of Emergency Planning that contractors "obtain advance approval to use Government-owned machine tools on commercial work exceeding 25 percent of the total usage." You specifically asked if this requirement applies to equipment purchased with Department of Defense funds and other funds besides Defense Production Act funds.

On the basis of a review of Defense Mobilization Order 8555.1, issued by the Office of Emergency Planning on November 13, 1963, and discussions with officials of the Office of Emergency Planning and the Department of Defense, we have determined that the requirement for advance approval is not restricted to equipment purchased from Defense Production Act funds. The Order is applicable to 18 classes of metal-working machines and machine tools owned by those Federal departments and agencies having production equipment emergency prepared-

ness functions assigned by Executive Orders.

You also requested information concerning the extent to which requests were made to the Office of Emergency Planning for the use of Government-owned industrial plant equipment, the amount of equipment involved, and the actions

taken by that Office.

Data furnished us by the Office of Emergency Planning during our review indictate that a total of five lease requests had been submitted to that Office during the period January 1, 1965 to November 21, 1966. A brief discussion on each of these lease requests follows.

PROPOSED LEASE OF GOVERNMENT-OWNED PRODUCTION EQUIPMENT TO THOMPSON RAMO WOOLDRIDGE, INC., CLEVELAND, OHIO

On February 5, 1965, a letter was submitted by the Director for Weapons Systems Scheduling and Analysis, Office of the Assistant Secretary of Defense (Installations and Logistics), requesting approval to lease the entire package of equipment used for production of M-14 rifles to Thompson Ramo Wooldridge, Inc., Cleveland, Ohio, for use in developing and producing commercial sporting rifles.

On March 25, 1965, the Deputy Director, Office of Emergency Planning, denied the request for approval of the proposed lease on the basis that it would provide Thompson Ramo Wooldridge an unfair competitive advantage over established

United States companies producing sporting rifles.

RENEWAL OF LEASE OF GOVERNMENT-OWNED PRODUCTION EQUIPMENT TO ALLIS-CHALMERS MANUFACTURING COMPANY, YORK, PENNSYLVANIA

On March 19, 1965, a letter was submitted by the Director for Weapons Systems Scheduling and Analysis, Office of the Assistant Secretary of Defense (Installations and Logistics), requesting authority to renew for 3 years a 40-foot vertical boring mill with an option for an additional 3-year renewal to the Allis-Chalmers Manufacturing Company, York, Pennsylvania. This item was originally leased to S. Morgan Smith Company, York, Pennsylvania, which subsequently merged with Allis-Chalmers.

On April 16, 1965, the Deputy Director, Office of Emergency Planning, approved

the renewal for 3 years but denied the request for renewal option.

LEASING OF ITEMS INCLUDED IN THE AIR FORCE HEAVY PRESS PROGRAM

On August 18, 1965, a letter was submitted by the Director for Weapons Analysis and Readiness, Office of the Assistant Secretary of Defense (Installations and Logistics), requesting approval for deviation from the rental rates established by the Office of Emergency Planning for leasing of Government-owned production equipment for nondefense use so that leases of items included in the Air Force heavy press program could be renewed. Approval of partial nondefense use of a 144-inch tapered sheet rolling mill by ALCOA, Davenport, Iowa, was also requested.

On October 4, 1965, the Office of Emergency Planning approved the rate deviations and the renewal of leases through December 31, 1966, but requested a review of methods of leasing and usage with a view to possible modifications which would increase the yearly monetary return to the Government. Approval for the

nondefense use of the rolling mill was granted on the same date.

At that time companies leasing items under the Air Force heavy press program were:

Alcoa, Cleveland, Ohio.
Wyman-Gordon Co., N. Grafton, Mass.
Alcoa, Lafayette, Ind.
Dow Chemical Co., Madison, Ill.
Harvey Aluminum Co., Torrance, Calif.
Kaiser Co., Halethorpe, Md.
Curtiss-Wright, Buffalo, N.Y.
Canton Drop Forge, Canton, Ohio.

LEASE OF GOVERNMENT-OWNED PRODUCTION EQUIPMENT TO OLIN MATHIESON CHEMICAL CORPORATION, NEW HAVEN, CONNECTICUT

On February 28, 1966, a letter was submitted by the Director for Weapons Analysis and Readiness, Office of the Assistant Secretary of Defense (Installations and Logistics), requesting approval for the lease of five items of Government-owned production equipment to Olin Mathieson Chemical Corporation for approximately 90 days until replacement items ordered by the company were delivered. This request was approved by the Office of Emergency Planning on March 4, 1966.

PROPOSED LEASE OF FACILITIES COMPRISING AIR FORCE PLANT NO. 13, WICHITA, KANSAS, TO THE BOEING COMPANY FOR NONDEFENSE USE

On September 9, 1966, a letter was submitted by the Assistant Secretary of Defense (Installations and Logistics) requesting approval of an Air Force proposal to lease the facilities comprising Air Force Plant No. 13, Wichita, Kansas, to the Boeing Company for nondefense work. On October 13, 1966, the Director, Office of Emergency Planning, approved the

proposed lease subject to certain conditions which were made subject to review

based on further information.

On October 20, 1966, the Assistant Secretary of the Air Force (Installations and Logistics) requested the Office of Emergency Planning to remove the conditions imposed in the letter of October 13, 1966, on the basis of additional information.

In light of the additional information presented by the Air Force, the Office of Emergency Planning, on October 24, 1966, modified the conditions set forth in its letter of October 13, 1966, as follows:

"The lease will be for a five-year period with two additional five-year options

for renewal.

"The annual rental rates established in Defense Mobilization Order 8555.1 for machinery and equipment may be applied to the age of the machinery and equipment at the mid-point of the initial five-year period of the lease. This same rate will be applicable during each of the five-year option periods provided for in the lease."

We have not examined into the extent to which other requests have been made to the Office of Emergency Planning subsequent to November 21, 1966. In the event you wish us to pursue this matter, we shall be glad to do so.

We trust that this information is responsive to the questions raised in your

inquiry.

Sincerely yours.

Frank H. Weitzel. Assistant Comptroller General of the United States.

DECEMBER, 12, 1967.

Hon. THOMAS D. MORRIS. Assistant Secretary of Defense, Installations and Logistics, Department of Defense, Washington, D.C.

DEAR TOM: Members of the Subcommittee on Economy in Government were granted permission to ask additional written questions of witnesses who appeared at subcommittee hearings ending on December 8, 1967.

The following questions are therefore submitted to the DOD for answers:

1. GAO Report, "Need for Improvements in Controls over Government-Owned Property in Contractors' Plants," B-140389, November 24, 1967, page 10, states that DCAS and the military services have cognizance over the administration of Government-owned property at about 5508 contractors' plants.

Will you furnish a listing of the contractor plants and the value (cost or

otherwise) of the Government-owned property at each.

Your reply will be appreciated as soon as possible but not later than December 21, 1967.

Sincerely,

WILLIAM PROXMIRE, Chairman.

Note: Information furnished in response to above letter is retained in the subcommittee files and not included herein.

> House of Representatives, Washington, D.C., December 14, 1967.

Hon. WILLIAM E. PROXMIRE.

Chairman, Subcommittee on Economy in Government, Joint Economic Committee. U.S. Senate, Washington, D.C.

DEAR BILL: I had intended asking the Comptroller General the following questions concerning the A-76 Program.

If it is not too late, will you please ask him to submit answers to these questions for the record:

1. Under a liberal interpretation of the ruling of the Counsel for the Civil Service Commission is not the A-76 Program seriously threatened?

2. What do you estimate is a relative extent of the government participation in "service activities" like Force Account compared to "product ac-

tivities"?

3. I have noted that the GAO has made a number of studies which have questioned service type contracts but has the GAO made any studies questioning the government's conduct of service type activities like Force Account? If so, please supply a list of such studies.

Sincerely,

THOMAS B. CURTIS.

COMPTROLLER GENERAL OF THE UNITED STATES, Washington, D.C., January 26, 1968.

Hon. WILLIAM E. PROXMIRE, Chairman, Joint Economic Committee, Congress of the United States.

DEAR MR. CHAIRMAN: This is in response to a letter from your Executive Director dated December 28, 1967, requesting our comments on three questions raised by the Honorable Thomas B. Curtis concerning Bureau of the Budget Circular No. A-76 in his letter to your Subcommittee on Economy in Government, dated December 14, 1967.

Question 1. Under a liberal interpretation of the ruling of the Counsel for the

Civil Service Commission is not the A-76 Program seriously threatened?

We believe that the October 1967 opinion of the General Counsel of the Civil Service Commission relates to contracts in which the relationship between the Government and the contractors' employees is tantamount to an employer-employee relationship. The opinion relates, in general, to contracts which provide for the performance of a Government function in Government facilities and under detailed supervision by Government employees. The elements and criteria applied in the General Counsel's opinion are to be used in determining whether a contract by its terms, or in its performance, constitutes the procurement of personal services proscribed by the Government personnel laws.

The provisions of Circular No. A-76 manifest the executive branch philosophy

The provisions of Circular No. A-76 manifest the executive branch philosophy of relying upon the private sector to satisfy the Government's "commercial or industrial" needs. It is our view that the services which might be involved in the opinion generally are not "commercial or industrial" in nature. The conversion of any commercial or industrial service now being performed by a contractor as an "independent contractor" to in-house operation must still be

justified under the rules prescribed in Circular No. A-76.

There are a wide range of services of an industrial and commercial nature which agencies lawfully undertake in conformity with the existing policy directive set forth in that circular and which continue to be proper. It is significant, however, that the circular specifically states that it will not be "used to justify departure from any law or regulation, including regulations of the Civil Service Commission or other appropriate authority, nor will it be used for the purpose

of avoiding established salary or personnel limitations."

In our opinion, the ruling of the Counsel for the Commission does not seriously threaten the policies enunciated in Circular No. A-76. However, it does perhaps point up a need for clarification of that circular so as to more clearly establish a distinction between products and services that are commercial and industrial in character, and thus clearly in the realm of the private sector, and the type of services involved in the opinion in question. We brought this matter to the attention of the Director of the Bureau of the Budget by letter dated August 3, 1967.

Question 2. What do you estimate is a relative extent of the Government participation in "service activities" like Force Account compared to "product

activities"?

We do not believe that there is any readily available information on which a broad estimate could be made. Although Bureau of the Budget Circular No. A-76 calls for an inventory of commercial or industrial activities of more than a nominal size, we understand that this inventory has not been completed. However, the Department of Defense has furnished us with certain data for fiscal

year 1967, developed in connection with the inventory requirement, which may prove helpful to you as we have summarized it below:

|                                     | Pers                 | sonnel  | Dollars                  |         |  |
|-------------------------------------|----------------------|---------|--------------------------|---------|--|
|                                     | Number               | Percent | Amount<br>(in thousands) | Percent |  |
| Contract.                           | 157, 447             | 23.4    | \$1, 459, 725            | 21. 3   |  |
| Government;<br>Civilian<br>Military | 396, 008<br>117, 474 |         |                          |         |  |
| Subtotal                            | 514, 274             | 76.6    | 5, 398, 409              | 78. 7   |  |
| Total                               | 671,721              | 100.0   | 6, 858, 134              | 100.0   |  |

The above activities include maintenance, repair, and modification of equipment such as aircraft, vehicles, missiles, and communication equipment; maintenance and operations such as utilities operation (Government-owned), installation bus services, laundry services, custodial services, and maintenance of furniture, buildings, and grounds; nonmanufacturing services such as packing and crating, warehouse operations, printing, photographic services, and communications; and data processing services such as systems work, programming, and equipment operation.

Question 3. Has the General Accounting Office made any studies questioning the Government's conduct of service-type activities like Force Account? If so,

please supply a list of such studies.

Enclosed is a list of studies of Government service-type activities which we have made in recent years. The nature of our finding or conclusion in each case is indicated where appropriate. This list also includes some cases in which we found that it would be advantageous for the Government to rely on commercial sources for items or parts rather than produce them in its own industrial-type activities. A number of these studies originated with requests from congressional committees or individual members of the Congress, and our reports generally were restricted in distribution, as is our custom in such circumstances unless otherwise authorized by the addressee. These restricted reports are indicated on the list. We believe, however, that arrangements can be made to have copies provided to you, along with any of the others on the list, if you so desire.

There have been a number of other studies in which similar questions were involved, particularly as a side issue to some more immediate review objective. In many cases conclusive determinations could not be readily made or the effort required to do so was not deemed justified in terms of relative significance.

In addition to other review work pertaining to service-type activities, this Office has presently in process a report concerning selected activities of the Department of the Army. In several of these cases, we found that the services could be provided more economically by contract than under Government "in-house" operation. In these cases the significant factor was the lower wages paid by the contractors compared with wages which would apparently be required to meet minimum applicable Government standards.

Please let us know if you have any further questions or comments on this

matter.

Sincerely yours,

ELMER B. STAATS, Comptroller General of the United States.

# REPORTS RELATING TO SERVICE-TYPE AND CERTAIN OTHER ACTIVITIES CONDUCTED BY THE GOVERNMENT

| Report title or subject   | Reference  | Date          |
|---|------------|---------------|
| Operation of a dairy farm by the U.S. Naval Academy, Annapolis, Md., Department of the Navy (we found that it would be more economical to rely on commercial sources for dairy  | D 150107   | Mor 22 1066   |
| products). Savings available through more extensive use of contract vehicle service and of certain  | B-156167   | Mar. 23, 1966 |
| mail-handling equipment, Post Unice Department  | B-114874   | Nov. 29, 1965 |
| tinental United States where adequate commercial racinities are available, Department   | B-146875   | Apr. 16, 1964 |
| of Defense-<br>Letter to the chairman of the Joint Economic Committee concerning commissary stores<br>(contents restricted)(contents restricted)  | B-146875 1 | July 9, 1964  |
| (contents restricted)—<br>Letter to Hon. Thomas B. Curtis concerning commissary stores (contents restricted)—<br>Followup review of Government production compared to procurement of weapons and re-<br>lated parts, Department of the Army (we found that unnecessary costs were incurred by<br>placing orders with arsenals without comparing costs with prices of commercial | B-1468751  | Dec. 14, 1964 |
|   | B-146848   | Aug. 31, 1964 |
| Sources).  Unnecessary costs resulting from Government production of M-60 machineguns and repair parts rather than procurement from the commercial source, Department of the Army_unnecessary costs resulting from Government production of M-14 rifle repair parts rather Unnecessary costs resulting from Government production of M-14 rifle repair parts rather             | B-146883   | Aug. 21, 1964 |
| Unnecessary costs resulting from Government production of In-1 Are Technology for than procurement from commercial sources, Department of the Army.  Letters to Hon. Harold T. Johnson concerning maintenance of radio equipment (contents  | B-146848   | Feb. 7, 1964  |
|   | B-148347 1 | June 29, 1962 |
| restricted)(Contents restricted)  | B-148347 1 | Oct. 22, 1962 |

<sup>1</sup> Information in these reports not to be released to persons outside GAO without the approval of the congressional official to whom the report is addressed.

Congress of the United States, Joint Economic Committee, December 18, 1967.

Hon. Elmer B. Staats, Comptroller General of the United States, Washington, D.C.

DEAR MR. STAATS: Enclosed is a copy of a letter dated December 8, 1967 from the Honorable William B. Widnall concerning testimony given to the Subcommittee on Economy in Government by Mr. Lewis R. Caveney on November 30, 1967.

Will you please investigate the points raised by this letter and report to the Subcommittee? At the present time, no date has been set for additional hearings but I would appreciate your report as soon as your staff load will permit.

Sincerely,

WILLIAM PROXMIRE, Chairman.

House of Representatives, Washington, D.C., December 8, 1967.

Hon. WILLIAM PROXMIRE, Chairman, Joint Economic Committee, New Senate Office Building, Washington, D.C.

Dear Mr. Chairman: In his testimony before the Subcommittee on Economy in Government of the Joint Economic Committee on November 30, Mr. Lewis R. Caveney of the Bryant Computer Products Division of Ex-Cell-o Corporation noted one instance in which had the Government procured a computer system on the basis of buying from peripheral manufacturers rather than from one systems manufacturer the savings to the Government in that one instance alone would have amounted to \$429,250. He also stated that this savings was just the initial cost savings, that additional savings were possible in the one instance, from a savings on 336 square feet of space, at \$100 per square foot, according to the General Services Administration, and a savings on the number of individual parts which required maintenance and manpower. Mr. Caveney contended that his figures in this one instance could be substantiated by the General Accounting Office.

My inquiry, then, is this: Could the General Accounting Office both substantiate the instance Mr. Caveney referred to and go one step further and study computer procurements in both the General Services Administration and the Department of Defense to determine what savings could accrue to the Federal

Government by direct procurement of peripheral parts of computer systems from peripheral manufacturers? I note the studies that have been made concerning the procurement of aeronautical space parts and others which have led to

a substantial savings for the Federal Government.

We are currently spending some \$3 billion annually for computer systems. If the Federal Government can purchase these systems at a substantial savings by direct purchase from the peripheral manufacturers, then a study such as I propose would be well worth the effort. I would hope that such a study could be completed for the Joint Economic Committee before its next meeting in the Spring of 1967.

Sincerely,

WILLIAM B. WIDNALL, Member of Congress.

At the time these hearings went to press the GAO had not completed the study covering the points raised by Representative Widnall. Their reply will be furnished to the Subcommittee on Economy in Government upon completion and will be retained in the subcommittee files.

# APPENDIX 13

# BUREAU OF THE BUDGET CIRCULAR A-76 REVISED WITH ANALYSIS

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D.C., August 30, 1967.

CIRCULAR NO. A-II, REVISED-TRANSMITTAL MEMORANDUM NO. I

To: The heads of executive departments and establishments. Subject: Policies for acquiring commercial or industrial products and services for

Government use.

Transmitted herewith is a revision of Bureau of the Budget Circular A-76 dated March 3, 1966. It is issued to clarify some provisions of the earlier circular and to lessen the burden of work by the agencies in implementing its provisions.

A brief summary of the changes is attached.

There is no change in the Government's general policy of relying upon the private enterprise system to supply its needs, except where it is in the national interest for the Government to provide directly the products and services it uses.

We intend to keep the provisions of the circular under continuing review. We anticipate that further changes will be desirable in light of experience gained from implementing the circular's provisions, including the required reviews of existing Government commercial or industrial activities to be completed by June 30, 1968. We intend to give special attention to the adequacy of the guidelines contained in the circular for such matters as comparative cost analyses; the circumstances under which cost differentials in favor of private enterprise are appropriate; and the use of contracts involving support services that require minimal capital investment.

We welcome your suggestions.

PHILLIP S. HUGHES,

Acting Director.

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D.C., August 30, 1967.

### CIRCULAR NO. A-76-REVISED

To: The heads of executive departments and establishments.

Subject: Policies for acquiring commercial or industrial products and services for Government use.

#### 1. Purpose

This circular replaces Bureau of the Budget Circular A-76 issued March 3, 1966. It is issued to clarify some provisions of the earlier circular and to lessen the burden of work by the agencies in implementing its provisions. The basic policies to be applied by executive agencies in determining whether commercial and industrial products and services used by the Government are to be provided by private suppliers or by the Government itself are the same as those contained in Circular A-76 dated March 3, 1966.

### 2. Policy

The guidelines in this circular are in furtherance of the Government's general policy of relying on the private enterprise system to supply its needs.

In some instances, however, it is in the national interest for the Government to provide directly the products and services it uses, these circumstances are set forth in paragraph 5 of this circular.

No executive agency will initiate a "new start" or continue the operation of an existing "Government commercial or industrial activity" except as specifically required by law or as provided in this circular.

### 3. Definitions

For purposes of this circular:

a, A "new start" is a newly established Government commercial or industrial activity involving additional capital investment of \$25,000 or more or additional annual costs of production of \$50,000 or more. A reactivation, expansion, modernization, or replacement of an activity involving additional capital investment of \$50,000 or more or additional annual costs of production of \$100,000 or more are, for purposes of this circular, also regarded as "new starts." Consolidation of two or more activities without increasing the overall total amount of products or services provided is not a "new start."

b. A "Government commercial or industrial activity" is one which is operated and managed by an executive agency and which provides for the Government's own use a product or service that is obtainable from a private source. The term

does not include a Government-owned contractor-operated activity.

c. A "private commercial source" is a private business concern which provides a commercial or industrial product or service required by agencies and which is located in the United States, its territories and possessions, the District of Columbia, or the Commonwealth of Puerto Rico.

# 4. Scope

This circular is applicable to commercial and industrial products and services

used by executive agencies, except that it:

(a) Will not be used as authority to enter into contracts if such authority does not otherwise exist nor will it be used to justify departure from any law or regulation, including regulations of the Civil Service Commission or other appropriate authority, nor will it be used for the purpose of avoiding established salary or personnel limitations.

(b) Does not alter the existing requirement that executive agencies will perform for themselves those basic functions of management which they must perform in order to retain essential control over the conduct of their programs. These functions include selection and direction of Government employees, assignment of organizational responsibilities, planning of programs, establishment of performance goals and priorities, and evaluation of performance.

(c) Does not apply to managerial advisory services such as those normally provided by an office of general counsel, a management and organization staff, or a systems analysis unit. Advisory assistance in areas such as these may be provided either by Government staff organizations or from private sources as

deemed appropriate by executive agencies.

(d) Does not apply to products or services which are provided to the public. (But an executive agency which provides a product or service to the public should apply the provisions of this circular with respect to any commercial or industrial products or services which it uses.)

(e) Does not apply to products or services obtained from other Federal agencies

which are authorized or required by law to furnish them.

(f) Should not be applied when its application would be inconsistent with the terms of any treaty or international agreement.

5. Circumstances under which the Government may provide a commercial or industrial product or service for its own use

A Government commercial or industrial activity may be authorized only under

one or more of the following conditions:

(a) Procurement of a product or service from a commercial source would disrupt or materially delay an agency's program. The fact that a commercial or industrial activity is classified or is related to an agency's basic program is not an adequate reason for starting or continuing a Government activity, but a Government agency may provide a product or service for its own use if a review conducted and documented as provided in paragraph 7 establishes that reliance upon a commercial source will disrupt or materially delay the successful accomplishment of its program.

(b) It is necessary for the Government to conduct a commercial or industrial activity for purposes of combat support or for individual and unit retraining of

military personnel or to maintain or strengthen mobilization readiness.

(c) A satisfactory commercial source is not available and cannot be developed in time to provide a product or service when it is needed. Agencies' efforts to find satisfactory commercial sources should be supplemented as appropriate by obtaining assistance from the General Services and Small Business Administra-

tions or the Business and Defense Services Administration. Urgency of a requirement is not an adequate reason for starting or continuing a Government commercial or industrial activity unless there is evidence that commercial sources are not able and the Government is able to provide a product or service when needed.

(d) The product or service is available from another Federal agency. Excess property available from other Federal agencies should be used in preference to new procurement as provided by the Federal Property and Administrative Serv-

ices Act of 1949, and related regulations.

Property which has not been reported excess also may be provided by other Federal agencies and unused plant and production capacity of other agencies may be utilized. In such instances, the agency supplying a product or service to another agency is responsible for compliance with this circular. The fact that a product or service is being provided to another agency does not by itself justify a Government commercial or industrial activity.

(e) Procurement of the product or service from a commercial source will result in higher cost to the Government. A Government commercial activity may be authorized if a comparative cost analysis prepared as provided in this circular indicates that the Government can provide or is providing a product or service at a cost lower than if the product or service were obtained from commercial

sources.

However, disadvantages of starting or continuing Government activities must be carefully weighed. Government ownership and operation of facilities usually involve removal or withholding of property from tax rolls, reduction of revenues from income and other taxes, and diversion of management attention from the Government's primary program objectives. Losses also may occur due to such factors as obsolescence of plant and equipment and unanticipated reductions in the Government's requirements for a product or service. Government commercial activities should not be started or continued for reasons involving comparative costs unless savings are sufficient to justify the assumption of these and similar risks and uncertainties.

## 6. Cost comparisons

A decision to reply upon a Government activity for reasons involving relative costs must be supported by a comparative cost analysis which will disclose as accurately as possible the difference between the cost which the Government is

incurring or will incur under each alternative.

Commercial sources should be relied upon without incurring the delay and expense of conducting cost comparison studies for products or services estimated to cost the Government less than \$50,000 per year. However, if there is reason to believe that inadequate compensation or other factors are causing commercial prices to be unreasonable, a cost comparison study will be directed by the agency head or by his designee even if it is estimated that the Government will spend less than \$50,000 per year for the product or service. A Government activity should not be authorized on the basis of such a comparison study, however, unless reasonable efforts to obtain satisfactory prices from existing commercial sources or to develop other commercial sources are unsuccessful.

Cost comparison studies also should be made before deciding to rely upon a commercial source when terms of contracts will cause the Government to finance directly or indirectly more than \$50,000 for cost of facilities and equipment to be constructed to Government specifications. Cost comparison studies should also be made in other cases if there is reason to believe that savings will not be made, however, if in-house provision of the product or service, or commercial procurement thereof, is clearly justified in accordance with other provisions of this

circular.

The determination as to whether to purchase or to lease equipment or to construct buildings or acquire their use under lease-construction arrangements involves a determination of the difference in costs under the alternatives, and the principles set forth in this circular should be applied to the extent relevant in

making such determinations.

(a.) Costs of obtaining products or services from commercial sources should include amounts paid directly to suppliers, transportation charges, and expenses of preparing bid invitations, evaluating bids, and negotiating, awarding, and managing contracts. Costs of materials furnished by the Government to contractors, appropriate charges for Government-owned equipment and facilities used

by contractors and costs due to incentive or premium provisions in contracts also should be included. If discontinuance of a Government commercial or industrial activity will cause a facility being retained by the Government for mobilization or other reasons to be placed in a standby status, the costs of preparing and maintaining the facility as standby also should be included. Similarily, if such a discontinuance is expected to result in premature retirement of Government employees which will cause a significant increase in retirement costs to the Government, such increased cost should be added to the cost of procurement from commercial sources. Costs of obtaining products or services from commercial sources should be documented and organized for comparison with costs of obtaining the product or service from a Government activity.

(b.) For purposes of economy and simplicity in making cost comparison studies, generally agreed costs that would tend to be the same under either alternative need not be measured and included (for example, bid and award costs and op-

erating costs under lease-purchase alternatives).

(c) Costs of obtaining products or services from Government activities should include all costs which would be incurred if a product or service were provided by the Government and which would not be incurred if the product or service were obtained from a commercial source. The objectives should be to compute, as realistically as possible, the incremental or additional cost that would be incurred by the Government under the alternatives under consideration. In making such determinations it is important that recognition be given to the full amount of additional or incremental direct and indirect cost to be incurred in providing the products or services required. Under this general principle, the following costs should be included, considering the circumstances of each case:

(1) Personal services and benefits.—Include costs of all elements of compensation and allowances for both military and civilian personnel, including the full cost to the Government of retirement systems, calculated on a normal cost basis, social security taxes where applicable, employees' insurance, health, and medical plans (including services available from Government military or civilian medical facilities), living allowances, uniforms, leave, termination and separation allowances, travel and moving expenses, and claims paid through the Bureau

of Employees' Compensation.

(2) Materials, supplies, and utilities services.—Include costs of supplies and materials used in providing a product or service and costs of transportation, storage, handling, custody, and protection of property, and costs of electric power, gas, water, and communications services.

(3) Maintenance and repair.—Include costs of maintaining and repairing

structures and equipment which are used in providing a product or service.

(4) Damage or loss of property.—Include costs of uninsured losses due to fire or other hazard, costs of insurance premiums, and costs of settling loss and

damage claims.

- (5) Federal taxes.—Include income and other Federal tax revenues (except social security taxes) received from corporations or other business entities (but not from individual stockholders) if a product or service is obtained through commercial channels. Estimates of corporate incomes for these purposes should be based upon the earnings experience of the industry, if available, but if such data are not available, "The Quarterly Financial Report of Manufacturing Corporations," published by the Federal Trade Commission and the Securities and Exchange Commission, may be consulted. Assistance of the appropriate Government regulatory agencies may be obtained in estimating taxes for regulated industries.
- (6) Depreciation.—Compute depreciation as a cost for any new or additional facilities or equipment which will be required if a Government activity is started or continued. Depreciation will not be allocated for facilities and equipment acquired by the Government before the cost comparison study is started. However, if reliance upon a commercial source will cause Government-owned equipment or facilities to become available for other Federal use or for disposal as surplus, the cost comparison analysis should include as a cost of the Government activity, an appropriate amount based upon the estimated current market value of such equipment or facilities. The Internal Revenue Service publication, "Depreciation Guidelines and Rules," may be used in computing depreciation. However, rates contained in this publication are maximums to be used only for reference purposes and only when more specific depreciation data are not available. Accelerated depreciation rates permitted in some instances by the Internal Revenue Service

will not be used. In computing the depreciation cost of new or additional facilities or equipment to be acquired if a Government activity is started or continued and in determining comparative costs under lease-purchase alternatives, appropriate recognition should be given to estimated residual or salvage values of the facilities or equipment.

(7) Interest.—Compute interest for any new or additional capital to be invested based upon the average rate of yield for long-term Treasury bonds as shown in the current monthly Treasury Bulletin. The method of computation should provide for reduction in the capital investment to which interest is ap-

plied over the useful life of the asset on a straight line basis.

(8) Indirect costs.-Include any additional indirect costs incurred resulting from a Government activity for such activities as management and supervision, budgeting, accounting, personnel, legal, and other applicable services.

### 7. Administering the policy

(a) Inventory.—Each agency will compile and maintain an inventory of its commercial or industrial activities having an annual output of products or services costing \$50,000 or more or a capital investment of \$25,000 or more. In addition to such general descriptive information as may be appropriate, the inventory should include for each activity the amount of the Government's capital investment, the amount paid annually for the products or services involved, and the basis upon which the activity is being continued under the provisions of this circular. The general descriptive information needed for identifying each activity should have been included in the inventory by June 30, 1966. Other information needed to complete the inventory should be added as reviews required in paragraphs 7 (b) and (c) are completed.
(b) "New starts."—

(1) A "new start" should not be initiated until possibilities of obtaining the product or service from commercial sources have been explored and not until it is approved by the agency head or by an Assistant Secretary or official of equivalent rank, on the basis of factual justification for establishing the activity under the provisions of this circular.

(2) If statutory authority and funds for construction are required before a "new start" can be initiated, the actions to be taken under this circular should be completed before the agency's budget request is submitted to the Bureau of the Budget. Instructions concerning data to be submitted in support of such budget requests will be included in annual revisions of Bureau of the Budget Circular

No. A-11.

(3) A "new start" should not be proposed for reasons involving comparative costs unless savings are sufficient to outweigh uncertainties and risks of un-

anticipated losses involved in Government activities.

The amount of savings required as justification for a "new start" will vary depending on individual circumstances. Substantial savings should be required as justification if a large new or additional capital investment is involved or if there are possibilities of early obsolescence or uncertainties regarding maintenance and production costs, prices and future Government requirements. Justification may be based on smaller anticipated savings if little or no capital investment is involved, if chances for obsolescence are minimal, and if reliable information is available concerning production costs, commercial prices and Government requirements. While no precise standard is prescribed in view of these varying circumstances a "new start" ordinarily should not be approved unless costs of a Government activity will be at least 10 percent less than costs of obtaining the product or service from commercial sources. It is emphasized that 10 percent is not intended to be a fixed figure.

A decision to reject a proposed "new start" for comparative cost reasons should be reconsidered if actual bids or proposals indicate that commercial prices will be

higher than were estimated in the cost comparison study.

(4) When a "new start" begins to operate it should be included in an agency's inventory of commercial and industrial activities.

c. Existing Government activities.-

(1) A systematic review of existing commercial or industrial activities (including previously approved "new starts" which have been in operation for at least 18 months) should be maintained in each agency under the direction of the agency head or the person designated by him as provided in paragraph 8. The agency head or his designee may exempt designated activities if he decides that such reviews are not warranted in specific instances. Activities not so exempted should be reviewed at least once before June 30, 1968. More frequent reviews of selected activities should be scheduled as deemed advisable. Activities remaining in the inventory after June 30, 1968, should be scheduled for at least one additional followup review during each 3-year period but this requirement may be waived by the agency head or his designee if he concludes that such further review is not warranted.

(2) Reviews should be organized in such a manner as to ascertain whether continued operation of Government commercial activities is in accordance with the provisions of this circular. Reviews should include information concerning availability from commercial sources of products or services involved and feasibility of using commercial sources in lieu of existing Government activities.

(3) An activity should be continued for reasons of comparative costs only if a comparative cost analysis indicates that savings resulting from continuation of the activity are at least sufficient to outweigh the disadvantages of Government commercial and industrial activities. No specific standard or guideline is prescribed for deciding whether savings are sufficient to justify continuation of an existing Government commercial activity and each activity should be evaluated on the basis of the applicable circumstances.

(4) A report of each review should be prepared. A decision to continue an activity should be approved by an assistant secretary or official of equivalent rank and the basis for the decision should appear in the inventory record for the activity. Activities not so approved should be discontinued. Reasonable adjustments in the timing of such actions may be made, however, in order to alleviate economic dislocations and personal hardships to affected career personnel.

### 8. Implementation

Each agency is responsible for making the provisions of this circular effective by issuing appropriate implementing instructions and by providing adequate management support and procedures for review and followup to assure that the instructions are placed in effect. A copy of the implementing instructions issued by each agency will be furnished to the Bureau of the Budget.

If overall responsibility for these actions is delegated by the agency head, it should be assigned to a senior official reporting directly to the agency head.

If legislation is needed in order to carry out the purposes of this circular, agencies should prepare necessary legislative proposals for review in accordance with Bureau of the Budget Circular No. A-19.

#### 9. Effective date

This circular is effective on October 2, 1967.

PHILLIP S. HUGHES,
Acting Director.

# SUMMARY OF CHANGES IN BUREAU OF THE BUDGET CIRCULAR NO. A-76 AS REVISED AUGUST 1967

#### PARAGRAPH 3-DEFINITIONS

3.a. The definition for a "new start" has been split as between (a) a newly established Government commercial or industrial activity and (b) a reactivation, expansion, modernization, or replacement of an activity. These separate definitions have been provided so that different dollar limitations on capital investment and annual cost of production may be applied. There is no change in the dollar limitations applicable to newly established Government commercial or industrial activities. But the dollar limitations have been doubled for the category of "new starts" that are a reactivation, expansion, modernization, or replacement of an activity. The change is necessary in order to avoid applying the "new start" procedures to routine adjustments for handling existing workload. For example, the replacement of a single machine tool at a shipyard may easily add capital cost of more than \$25,000, or the addition of only 10 employees at relatively low grades would add more than \$50,000 per year to production cost. This type of change occurs several times a year at a large facility and, under the terms of the earlier Circular A-76, each such change would have to be treated as a "new start" with a detailed cost study and a special approval.

3.b. The definition of a Government commercial or industrial activity has been clarified. The earlier circular, by definition, excluded a Government-owned, contractor-operated activity but the wording was not entirely clear. The change

made clarifies the fact that a Government-owned, contractor-operated activity is not to be regarded as a Government commercial or industrial activity for purposes of the circular.

PARAGRAPH 4—Scope

4.c. The words "professional staff" that were contained in the earlier circular have been eliminated. Paragraph 4.c. is intended to exempt various kinds of staff advisory services which are so intimately related to the processes of top management and control of Government programs that the general provisions of A-76 favoring reliance upon commercial sources should not be applicable. The term "professional staff" was so broad that it could be interpreted to apply to a large variety of services which are commercially available and which are not necessarily related intimately to top management and control of Government programs. The change will clarify the meaning of this subparagraph.

### PARAGRAPH 6-COST COMPARISONS

A change is made in the third unnumbered paragraph to make clear that if there is reason to believe savings can be realized by the Government providing for its own needs, cost comparison studies should be made before deciding to rely upon a commercial source. However, the changed wording also makes it clear that cost studies will not be required if in-house provision of the product of service, or commercial procurement thereof, is clearly justified in accordance with other provisions of the circular.

A new numbered paragraph has been added to provide guidelines for applying provisions of the circular to purchase versus lease of equipment, and to construction of buildings versus acquisition under lease-construction arrangements. The paragraph requires a determination of the difference in costs under the alternatives, and application of the principles set forth in the circular in making judg-

ments in these areas.

6.a. A sentence has been added providing that if discontinuance of a Government commercial or industrial activity will result in premature retirement of Government employees, and will cause a significant increase in retirement costs to the Government, such increased costs should be added to the cost of procurement from commercial sources.

6.b. This is a new subparagraph. It provides that costs which would tend to be the same for both Government and industry need not be measured and included in comparative cost analyses (for example, bid and award costs and operating costs under lease-purchase alternatives). The change is made in the interest of

economy and simplicity in making cost comparisons.

6.c. (Paragraph 6.b. in the earlier circular). A sentence has been added to clarify the fact that the incremental method of costing is to be employed and to emphasize the importance of a realistic recognition of all such additional or incremental costs.

6.c.(1). (Paragraph 6.b.(1) in the earlier circular). Some additional wording has been added to clarify, in connection with personal services and benefits, that the full cost to the Government of retirement systems should be included.

6.c.(6). (Paragraph 6.b.(6) in the earlier circular). A sentence has been added to make clear that appropriate recognition should be given to estimated residual

or salvage value of facilities or equipment in computing depreciation.

6.c. (7). (Paragraph 6.b. (7) in the earlier circular.) This paragraph has been rewritten to provide that the computation of interest for any new or additional capital to be invested will be based upon the average rate of yield for long-term Treasury bonds as shown in the current monthly Treasury Bulletin. Also, the method of computation suggested would provide for reduction in the capital investment to which interest is applied as the asset is depreciated. The purpose of the change is to clarify the rate and source of interest to be charged and to provide guidance as to the principal to which it is to be applied. The suggested rate is a readily available measure of the current cost of money to the Government and the provision for reducing the balance to which interest is applied is considered reasonable because the interest cost should not go on indefinitely.

6.c.(8). (Paragraph 6.b.(8) in the earlier circular.) A change in wording

6.c.(8). (Paragraph 6.b.(8) in the earlier circular.) A change in wording has been made to clarify that Government costs should include any additional indirect costs incurred for such activities as management and supervision,

budgeting, accounting, personnel, legal, and other applicable services.

## PARAGRAPH 7—ADMINISTERING THE POLICY

7.b.(3). In the past there has been some misunderstanding about the cost differential in favor of private enterprise due to uncertainties relating to Government production costs, equipment obsolescence, and other factors, including the amount of capital investment involved. A sentence has been added to clarify the fact that the 10-percent cost differential in favor of private enterprise, mentioned in this subparagraph, is not intended to be a fixed figure. The differential may be more or less than 10 percent, depending upon the circumstances in each individual case.

# PARAGRAPH 8—IMPLEMENTATION

A sentence has been added requiring agencies to furnish the Bureau of the Budget with a copy of their implementing instructions.

#### APPENDIX 14

The following statistical information was not available at the time of the hearings but was subsequently supplied by the Department of Defense:

#### MAGNITUDE OF DOD PROPERTY MANAGEMENT ACTIVITIES

#### PROPERTY HOLDINGS

The total of DOD's real and personal property holdings has risen annually from \$129 billion in fiscal year 1955 to \$196 billion at the end of fiscal year 1967.

Real property holdings increased from \$21 to \$38 billion and personal property holdings, including construction in progress, from \$107 to \$157 billion during the 13-year period.

However, "supply systems" inventories have been reduced by \$9.4 billion during this period and "stock funds" by \$0.7 billion. During 1967, there was a considerable buildup of supply inventories.

TABLE 1.—DOD PROPERTY HOLDINGS AS OF JUNE 30, FISCAL YEARS 1955-67 1

[In millions of dollars]

| [in minors of assure,             |                     |                     |                     |                     |                     |                     |                     |  |  |
|-----------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--|--|
| Total and type of property        | 1955                | 1956                | 1957                | 1958                | 1959                | 1960                | 1961                |  |  |
| Total                             | 128, 694            | 134, 082            | 146, 021            | 149, 465            | 150, 660            | 154, 617            | 158, 508            |  |  |
| Real<br>Personal                  | 21, 343<br>107, 351 | 22, 918<br>111, 164 | 24, 892<br>121, 129 | 26, 891<br>112, 574 | 29, 689<br>120, 971 | 31, 997<br>122, 620 | 34, 038<br>124, 470 |  |  |
| Supply systems                    | 50, 780             | 50, 974             | 53, 799             | 47, 652             | 44, 467             | 42, 002             | 40, 837             |  |  |
| Stock funds<br>Appropriated funds | 8, 153<br>42, 627   | 9, 772<br>41, 202   | 10, 970<br>42, 829  | 8, 913<br>38, 739   | 8, 162<br>36, 305   | 7, 312<br>34, 690   | 6, 413<br>34, 424   |  |  |
| Total and type of property        | 1962                | 1963                | 1964                | 4 1                 | 965                 | 1966                | 1967                |  |  |
| Total                             | 164, 835            | 171, 364            | 173,                | 455 17              | 6, 221              | 183, 570            | 195, 552            |  |  |
| Real<br>Personal                  | 35, 378<br>129, 457 | 36, 565<br>134, 799 | 36,<br>136,         |                     | 7, 557<br>8, 664    | 38, 390<br>145, 180 | 38, 495<br>157, 057 |  |  |
| Supply systems                    | 40, 652             | 40, 096             | 38,                 | 795 3               | 6, 986              | 37, 661             | 41,361              |  |  |
| Stock funds<br>Appropriated funds | 6, 154<br>34, 498   | 6, 527<br>33, 569   | 5,<br>33,           |                     | 5, 327<br>1, 659    | 5, 850<br>31, 811   | 7, 503<br>33, 858   |  |  |
|                                   |                     |                     |                     |                     |                     |                     |                     |  |  |

<sup>1</sup> Source, "Real and Personal Property of the Department of Defense," an annual report.

Expenditures for DOD military functions represented 8.8 percent of the gross national product in fiscal year 1967, as compared to 7.6 percent in fiscal year 1966.

#### SUPPLY SYSTEMS INVENTORIES

As stated in table 1 above, the total of "supply systems" inventories from fiscal year 1955 through fiscal year 1966, was reduced from \$51 to \$38 billion or \$13 billion. In fiscal year 1967, it was increased to \$41 billion. The stratification of such stocks, or breakdown into purpose for which they are held, reflects a distinct change during fiscal years 1964, 1965, and 1966. In prior years, the strata were peacetime operating stocks, mobilization reserve stock, economic and contingency retention stocks, and excess stock. These are shown in table 7 and are explained in footnotes 2 through 7.

Stratification of supply systems inventories as of June 30, 1964, and June 30, 1965, was in accordance with improved logistics guidance which called for application of assets first against requirements to support (1) approved forces; that is Active and high-priority Reserve Forces of the 5-year force structure and financial program; and (2) general forces.

The guidance was again changed so that, as of June 30, 1966 and June 30, 1967, assets are applied to approved forces, either as authorized for acquisition or for

retention.

The data for these strata are not comparable with that in prior years, except in a very general way, and therefore, have not been shown separately in the

table (see footnotes) but are included in subtotal and total.

The criteria for the establishment of economic retention and contingency retention strata have not been drastically revised, although the exigencies of world situations may result in somewhat different levels being established under them. The excess strata now represents those stocks that are beyond limits of a particular service and for which screening for utilization by other elements of the Department of Defense is underway but for which final DOD disposal action has not been initiated. They are significantly less in value than those reported in prior years.

TABLE 2.--DOD SUPPLY SYSTEMS INVENTORIES BY INVENTORY STRATAS AS OF JUNE 30,1 FISCAL YEARS 1958-67

|   | [In millions of dollars]                          |  |  |   |  |   |                                       |                                       |                                       |                                       |
|---|---|--|--|---|--|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Total and inventory strata  | 1958  | 1959   | 1960   | 1961  | 1962   | 1963  | 1964                                  | 1965                                  | 1966                                  | 1967                                  |
| Total   | 46, 585   | 44, 203  | 41,727   | 40, 537                                     | 40, 299  | 39, 684                                       | 38, 383                               | 36, 506                               | 37, 167                               | 40, 341                               |
| Unstratified<br>Total stratified  | 2, 440<br>44, 145                                 | 3, 056<br>41, 147                                | 2, 083<br>39, 644                                | 1,819<br>38,717                             | 1, 837<br>38, 462                                | 1, 425<br>38, 259                             | 2, 582<br>35, 801                     | 2,704<br>33,802                       | 3, 221<br>33, 946                     | 3,070<br>37,271                       |
| Peacetime operating 2 Mobilization reserve 4 Economic retention 5 Contingency retention 6 Excess stocks 7 | 14, 538<br>12, 134<br>5, 593<br>1, 050<br>10, 418 | 15, 306<br>11, 530<br>4, 703<br>1, 611<br>7, 146 | 15, 657<br>10, 893<br>6, 618<br>1, 361<br>5, 115 | 14,722<br>11,030<br>6,343<br>1,246<br>5,377 | 15, 601<br>10, 725<br>5, 454<br>1, 040<br>5, 643 | 15, 379<br>10, 921<br>5, 912<br>636<br>5, 411 | (3)<br>(3)<br>3,596<br>1,248<br>5,528 | (3)<br>(3)<br>3,629<br>1,814<br>3,466 | (3)<br>(3)<br>4,180<br>1,865<br>3,250 | (3)<br>(3)<br>3,760<br>2,310<br>3,158 |

<sup>1</sup> Total inventories in this table do not include value of Navy shipboard supplies included in table 3.

<sup>2</sup>Peacetime operating stock is that portion of the total quantity of an item on hand which is required to equip and train he planned peacetime forces and support the scheduled establishment through the normal appropriation and leadtime

ne planned peacetime forces and support the scheduled establishment through the normal appropriation and leacitime periods.

3 These strata are not available for 1964, 1965, 1966, and 1967 because of changes in logistics guidance. In 1965 their sum was \$24,893,000,000, divided into approved force stocks (\$23,665,000,000) and general force stocks (\$1,228,000,000). The guidance was again revised in 1966 when the sum of these 2 was \$24,651,000,000 allocated to approved forces as levels of acquisition (\$23,640,000,000) and retention (\$1,011,000,000). In 1967, the sum was \$28,043,000,000, allocated to approved forces as levels of acquisition (\$27,173,000,000) and retention (\$870,000,000).

4 Mobilization reserve materiel requirement: The quantity of an item required to be in the military supply system on M-day, in addition to quantities for peacetime needs, to support planned mobilization to expand the materiel pipeline, and to sustain in training, combat, or noncombat operations prescribed forces until production by industry equals consumption.

Seconomic retention stock is that portion of the quantity in long supply which it has been determined will be retained for future peacetime issue of consumption as being more economical than future replenishment by procurement.

Contingency retention stock is that portion of the quantity in long supply of an obsolete or nonstandard item for which no programed requirements exist and which normally would be considered as excess stock, but which has been determined will be retained for possible military or defense contingencies for United States or allied forces.

7 Excess stock as reported herein is stock which is indicated to be above the sum of footnotes 2, 3, 4, and 5 above and for which specific determination as being within the needs of the Department of Defense has not been made or disposal

action initiated.

#### SCOPE OF PROCUREMENT ACTIVITIES

The net value of military procurement actions amounted to \$41.8 billion in fiscal year 1967, an increase of \$6.1 billion over fiscal year 1966.

TABLE 3.—NET VALUE OF MILITARY PROCUREMENT ACTIONS IN THE UNITED STATES AND POSSESSIONS, FISCAL YEARS 1951-67

[In billions of dollars]

|                              | Fiscal year | Net va<br>of mili<br>procure<br>actio | tary<br>ment                         | Fiscal year          | Net value<br>of military<br>procurement<br>actions |
|------------------------------|-------------|---------------------------------------|--------------------------------------|----------------------|--|
| 1951<br>1952<br>1953<br>1954 |             |                                       | 31.9<br>42.2<br>28.4<br>11.9<br>15.5 | 1960                 | 22.<br>24.<br>27.<br>28.                           |
| 1956<br>1957<br>1958<br>1959 |             |                                       | 18. 2<br>19. 9<br>22. 8<br>23. 9     | 1965<br>1966<br>1967 | 26.<br>35.<br>41.                                  |

Source: "Military Prime Contract Awards and Subcontract Payments or Commitments, July 1966-June 1967," Office of the Secretary of Defense.

The breakdown of awards by States and the District of Columbia for experimental, developmental, test, and research work shows (see table 12):

| Per | cent of total: |      |      | of St | ates |
|-----|----------------|------|------|-------|------|
|     | Over 30        | <br> | <br> |       | 1    |
|     | 5 to 10        | <br> | <br> |       | 3    |
|     | 4 to 5         |      |      |       | 2    |
|     | 3 to 4         |      | <br> |       | 5    |
|     | 2 to 3         |      |      |       | 1    |
|     | 1 to 2         |      |      |       | 7    |
|     | 0 to 1         |      |      |       | 32   |

TABLE 4.—MILITARY PRIME CONTRACT AWARDS OF \$10,000 OR MORE FOR RESEARCH, DEVELOPMENT, TEST AND EVALUATION WORK, BY REGION AND STATE AND BY TYPE OF CONTRACTOR, FISCAL YEAR 1967

| Region and State                       | Total  |                                     | Educational institutions                                   |                                    | Other nonprofit institutions 1                    |   | Business  | firms   |
|--|--|-------------------------------------|--|------------------------------------|---|---|---|---|
|  | Amount   | Percent                             | Amount   | Percent                            | Amount  | Percent   | Amount  | Percent   |
| U.S. total                             | \$5, 995, 892  | 100.0                               | \$381,690  | 100.0                              | \$289, 991  | 100. 0  | \$5, 324, 211   | 100.0   |
| New England                            | 649, 067   | 10.8                                | 107,608  | 28. 2                              | 28, 464   | 9.8   | 512, 995  | 9.6   |
| Maine                                  | 283<br>36, 925<br>4, 301<br>507, 000<br>12, 675<br>87, 883 | (2)<br>.6<br>.1<br>8.5<br>.2<br>1.5 | 0<br>532<br>122<br>102, 625<br>3, 023<br>1, 306<br>57, 929 | 26. 9<br>. 8<br>. 3                | 34<br>0<br>0<br>27, 307<br>0<br>1, 123<br>33, 983 | (2)<br>.0<br>9.4<br>.0<br>.4<br>=============================== | 249<br>36, 393<br>4, 179<br>377, 068<br>9, 652<br>85, 454<br>811, 551 | (2)<br>. 7<br>. 1<br>7. 1<br>. 2<br>1. 6<br>15. 2 |
| New York<br>New Jersey<br>Pennsylvania | 467, 698<br>178, 458<br>257, 307                           | 7. 8<br>3. 0<br>4. 3                | 30, 985<br>6, 223<br>20, 721                               | 8. 1<br>1. 6<br>5. 4               | 21,505<br>122<br>12,356                           | 7. 4<br>(2)<br>4. 3   | 415, 208<br>172, 113<br>224, 230                                      | 3. 2<br>4. 2                                      |
| East North Central                     | 519, 687   | 8.7                                 | 40, 996  | 10.7                               | 24, 038   | 8.3   | 454, 653  | 8, 6  |
| Ohio                                   | 261, 176<br>49, 715<br>51, 339<br>130, 701<br>26, 756      | 4. 4<br>. 8<br>. 9<br>2. 2<br>. 4   | 7, 646<br>977<br>16, 894<br>13, 435<br>2, 044              | 2. 0<br>. 3<br>4. 4<br>3. 5<br>. 5 | 11, 392<br>2, 218<br>10, 159<br>104<br>165        | 3. 9<br>. 8<br>3. 5<br>(²)                                      | 242, 138<br>46, 520<br>24, 286<br>117, 162<br>24, 547                 | 4. 5<br>. 9<br>2. 2                               |

See footnotes at end of table.

TABLE 4.—MILITARY PRIME CONTRACT AWARDS OF \$10,000 OR MORE FOR RESEARCH, DEVELOPMENT, TEST AND EVALUATION WORK, BY REGION AND STATE AND BY TYPE OF CONTRACTOR, FISCAL YEAR 1967-Con.

|  |  |  |  | Type of co  |  |   |  |   |
|--|--|--|--|---|--|---|--|---|
| Region and State   | Tota   | ıl .   | Educati<br>institut  |   | Other nor institution  |   | Business   | firms   |
|  | Amount   | Percent  | Amount   | Percent   | Amount   | Percent                                       | Amount   | Percent   |
| West North Central   | 180, 433   | 3. 0   | 6, 084   | 1.6   | 166  | 0. 1  | 174, 183   | 3.3   |
| Minnesota<br>lowa.<br>Missouri<br>North Dakota<br>South Dakota<br>Nebraska<br>Kansas                                     | 75, 334<br>13, 227<br>78, 166<br>35<br>195<br>3, 515<br>9, 961                       | 1. 3<br>. 2<br>1. 3<br>(2)<br>(2)<br>(2)<br>(2)                      | 1,915<br>1,122<br>2,234<br>14<br>43<br>64<br>692                       | .5<br>.3<br>.6<br>(2)<br>(2)<br>(2)<br>(2)        | 224<br>0<br>3 -79<br>21<br>0<br>0                                      | (2)<br>.0<br>.0<br>.0<br>.0                   | 73, 195<br>12, 105<br>76, 011<br>0<br>152<br>3, 451<br>9, 269                                | 1.4<br>.2<br>1.4<br>.0<br>(²)                               |
| South Atlantic   | 843, 042   | 14.0   | 93, 758  | 24.6  | 53, 798  | 18.6  | 695, 486   | 13.1  |
| Delaware<br>Maryland<br>District of Columbia<br>Virginia<br>West Virginia<br>North Carolina<br>South Carolina<br>Georgia | 2,755<br>217,246<br>38,899<br>71,449<br>9,983<br>79,939<br>609<br>220,989<br>201,173 | (2)<br>3. 6<br>. 6<br>1. 2<br>. 2<br>1. 3<br>(2)<br>3. 7<br>3. 4     | 226<br>73,540<br>8,900<br>727<br>345<br>4,460<br>229<br>1,001<br>4,330 | 19.3<br>2.3<br>.2<br>.1<br>1.2<br>.1<br>.3        | 5, 479<br>10, 978<br>26, 429<br>7, 920<br>1, 282<br>0<br>1, 580<br>130 | 1.9<br>3.8<br>9.1<br>2.7<br>.4<br>.0<br>.5    | 2, 529<br>138, 227<br>19, 021<br>44, 293<br>1, 718<br>74, 197<br>380<br>218, 408<br>196, 713 | (2)<br>2.6<br>.4<br>.8<br>(2)<br>1.4<br>(2)<br>4.1<br>3.7   |
| South Central  | 477, 838   | 8. 0   | 11,713   | 3. 1  | 6, 815   | 2. 3  | 459, 310   | 8.6   |
| Kentucky Tennessee Alabama Mississippi Arkansas Louisiana Oklahoma Texas   | 961<br>60, 471<br>25, 213<br>376<br>261<br>1, 669<br>13, 339<br>375, 548             | (2)<br>1. 0<br>. 4<br>(2)<br>(2)<br>(2)<br>(2)<br>(2)<br>. 2<br>6. 3 | 372<br>941<br>807<br>285<br>41<br>839<br>1,783<br>6,645                | .1<br>.3<br>.2<br>.1<br>(2)<br>.5<br>1.7          | 0<br>75<br>969<br>0<br>0<br>37<br>283<br>5,451                         | (2)<br>.3<br>.0<br>.0<br>(2)<br>.1<br>1.9     | 589<br>59, 455<br>23, 437<br>91<br>220<br>793<br>11, 273<br>363, 452                         | (2)<br>1.1<br>(2)<br>(2)<br>(2)<br>(2)<br>(2)<br>(2)<br>6.8 |
| Mountain   | 199, 936   | 3.3  | 15, 644  | 4. 1  | 2, 699   | . 9   | 181, 593   | 3. 4  |
| Montana Idaho Vyoming Volorado Vtah Nevada Nevada Arizona Arizona  | 436<br>105<br>15<br>97, 159<br>16, 525<br>9, 341<br>33, 188<br>43, 167               | (2)<br>(2)<br>(2)<br>1. 6<br>. 3<br>. 2<br>. 6<br>. 7                | 333<br>40<br>15<br>5,551<br>2,984<br>28<br>5,113<br>1,580              | .1<br>(2)<br>(2)<br>1.5<br>.8<br>(2)<br>1.3<br>.4 | 0<br>0<br>713<br>28<br>147<br>1,326<br>485                             | .0<br>.0<br>.0<br>.3<br>(2)<br>.1<br>.5<br>.2 | 103<br>65<br>0<br>90,895<br>13,513<br>9,166<br>26,749<br>41,102                              | (2)<br>(2)<br>1.7<br>.3<br>.2<br>.5                         |
| Pacific  | 2, 212, 629  | 36.9   | 44, 328  | 11.6  | 139, 874   | 48. 2   | 2, 028, 427  | 38. 1   |
| Washington<br>Oregon<br>California   | 222, 059<br>920<br>1, 989, 650   | 3.7<br>(2)<br>33.2   | 5, 935<br>591<br>37, 802   | 1.6<br>.2<br>9.9                                  | 312<br>0<br>139, 562   | .1<br>.0<br>48.1                              | 215, 812<br>329<br>1, 812, 286   | 4.1<br>(2)<br>34.0  |
| Alaska and Hawaii  | 9, 797   | .2   | 3,630  | 1.0   | 154  | .1  | 6, 013   | .1  |
| Alaska<br>Hawaii   | 1,689<br>8,108   | (2)  | 1,614<br>2,016   | . 4   | 60<br>94   | (2)<br>(2)                                    | 15<br>5, 998   | (²) .1  |

<sup>1</sup> Includes contracts with other Government agencies.
2 Less than 0.05 percent.
3 The negative value results from contract cancellations in excess of new awards.

TABLE 5.—MILITARY PRIME CONTRACT AWARDS OF \$10,000 OR MORE FOR EXPERIMENTAL, DEVELOPMENTAL TEST, AND RESEARCH WORK IN ORDER OF RANK BY STATE AND THE DISTRICT OF COLUMBIA, FISCAL YEAR 1967

| Rank   | State   | Percent                                 | Total<br>percent                        | Rank   | State  | Percent                       | Total<br>percent  |
|--|---------|---|---|--|--|-------------------------------|---|
| 1 2 3 3 4 5 5 6 6 7 7 8 8 9 10 11 11 12 11 14 15 16 11 17 17 17 17 17 17 2 2 2 2 2 2 2 2 2 | Wyoming | 000000000000000000000000000000000000000 | (0) (0) (0) (0) (0) (0) (0) (0) (0) (0) | 27<br>28<br>29<br>30<br>31<br>32<br>33<br>34<br>35<br>36<br>36<br>36<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48<br>49<br>50<br>51 | New Mexico New Hampshire District of Columbia Arizona Indiana Illinois Tennessee Virginia Minnesota Missouri North Carolina Connecticut Colorado Michigan New Jersey Florida Maryland Georgia Washington Pennsylvania Ohio Texas New York Massachusetts California | 0.666789023335620467773443852 | 3. 1<br>3. 7<br>4. 0<br>5. 8<br>7<br>7. 7<br>9<br>10. 2<br>112. 8<br>14. 3<br>124. 5<br>124. 5<br>125. 1<br>224. 5<br>129. 3<br>31. 8<br>5<br>5<br>6. 8<br>100. 0 |

<sup>1</sup> Less than 0.05 percent.

#### APPENDIX 15

REFERENCES TO SUBCOMMITTEE REPORTS, HEARINGS, AND STAFF STUDIES

Report, October 1960: "Economic Aspects of Military Procurement and Supply," report of the Subcommittee on Defense Procurement to the Joint Economic Committee, Congress of the United States, 86th Congress, second sess. (Hereinafter called "Report, October 1960.")

Report, July 1963: "Impact of Military Supply and Service Activities on the report of the Subcommittee on Defense Procurement to the Joint Economic Committee, Congress of the United States, 88th Congress, first sess. July 1963. (Hereinafter called "Report, July 1963.")

Report, September 1964: "Economic Impact of Federal Supply and Service Activities," report of the Subcommittee on Defense Procurement to the Joint Economic Committee, Congress of the United States, 88th Congress, second sess.

(Hereinafter called "Report, September 1964.")

Report, July 1965: "Economic Impact of Federal Procurement," report of the Subcommittee on Federal Procurement and Regulation of the Joint Economic Committee, Congress of the United States, 89th Congress, first sess. (Hereinafter called "Report, July 1965.")

Report, May 1966: "Economic Impact of Federal Procurement-1966," report of the Subcommittee on Federal Procurement and Regulation of the Joint Economic Committee, Congress of the United States, 89th Congress, second sess.

(Hereinafter called "Report, May 1966.")

Report, July 1967: "Economy in Government," report of the Subcommittee on Economy in Government of the Joint Economic Committee, Congress of the U.S., 90th C., 1st sess. (Hereinafter called "Report, July 1967.")
Hearings, 1960: "Impact of Defense Procurement," hearings before the Sub-

committee on Defense Procurement of the Joint Economic Committee, Congress of the United States, 86th Congress, second session, January 28, 29, and 30, 1960.

(Hereinafter called "Hearings, 1960.")

Hearings, 1961: "Progress Made by the Department of Defense in Reducing the Impact of Military Procurement on the Economy," hearings before the Sub-committee on Defense Procurement of the Joint Economic Committee, Congress of the United States, 87th Congress, first session, June 12, 1961. (Hereinafter called "Hearings, 1961.")

Hearings, 1963: "Impact of Military Supply and Service Activities on the Economy," hearings before the Subcommittee on Defense Procurement of the Joint Economic Committee, Congress of the United States, 88th Congress, first

session, March 28, 29, and April 1, 1963. (Hereinafter called "Hearings, 1963.")
Hearings, 1964: "Impact of Military and Related Civilian Supply and Service Activities on the Economy." hearings before the Subcommittee on Defense Procurement of the Joint Economic Committee, Congress of the United States, 88th Congress, second session, April 16 and 21, 1964. (Hereinafter called "Hearings, 1964.")

Hearings, 1965: "Economic Impact of Federal Procurement," hearings before the Subcommittee on Federal Procurement and Regulation of the Joint Economic Committee, Congress of the United States, 89th Congress, first session, April 27, 28, and 29, 1965. (Hereinafter called "Hearings, 1965.")

Hearings, 1966: "Economic Impact of Federal Procurement," hearings before

the Subcommittee on Federal Procurement and Regulation of the Joint Economic Committee, Congress of the United States, 89th Congress, second session, Janu-

ary 24, and March 23 and 24, 1966. (Hereinafter called, "Hearings, 1966.")
Hearings, 1967: "Economy in Government," hearings before the Joint Economic Committee, Congress of the United States, 90th Congress, first session, May

8, 9, 10 and 16, 1967, parts 1 and 2. (Hereinafter called "Hearings, 1967.")
Staff study, 1960: "Background Material on Economic Aspects of Military Procurement and Supply," materials prepared for the Subcommittee on Defense Procurement of the Joint Economic Committee, Congress of the United States, 86th Congress, second session, February 1960. (Hereinafter called "Staff

Materials, 1960.")

Staff study, 1963: "Background Material on Economic Aspects of Military Procurement and Supply," materials prepared for the Subcommittee on Defense Procurement of the Joint Economic Committee, Congress of the United States, 88th Congress, first session, March 1963. (Hereinafter called "Staff Materials, 1963.")

Staff study, 1964; "Background Material on Economic Aspects of Military Procurement and Supply-1964," materials prepared for the Subcommittee on Defense Procurement of the Joint Economic Committee, Congress of the United States, 88th Congress, second session, April 1964. (Hereinafter called "Staff

Materials, 1964.")

Staff study, 1965: "Background Materials on Economic Impact of Federal Procurement," prepared for the Subcommittee on Federal Procurement and Regulation of the Joint Economic Committee, Congress of the United States, 89th

Congress, first session, April 1965. (Hereinafter called "Staff Materials, 1965.")
Staff study, 1966: "Background Material on Economic Impact of Federal Procurement—1966," materials prepared for the Subcommittee on Federal Procurement and Regulation of the Joint Economic Committee, Congress of the United States, 89th Congress, second session, March 1966. (Hereinafter called "Staff Materials, 1966.")

Staff study, 1967: "Background Material on Economy in Government—1967," materials prepared for the Subcommittee on Economy in Government of the Joint Economic Committee, Congress of the United States, 90th Congress, first session, April 1967. (Hereinafter called "Staff Materials, 1967.")

Staff study, 1967—updated: "Economy in Government—1967," updated background materials propagated: "Economy in Government—1967," updated background materials propagated for the Subcommittee on Economy in Government—1967.

ground material, materials prepared for the Subcommittee on Economy in Government of the Joint Economic Committee, Congress of the United States, 90th Congress, first session, November 1967. (Hereinafter called "Staff Materials, 1967 updated.")