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More air force per dollar as applied to facilities contracts.

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THESIS
"More Air Force Per Dollar as Applied To Facilities Contracts"

by
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MASTER OF BUSINESS ADMINISTRATION

1959
The recommendations and opinions expressed by the writer herein are exclusively his own, having been formulated through research conducted for presentation of this thesis. They are in no way intended to present or reflect the views of his employer, his company's officers, any other member of its organization, or of any individuals who were referred to or interviewed in the course of this research.
# More Air Force Per Dollar as Applied to Facility Contracts

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INTRODUCTION

Government procurement, in every sense, is becoming increasingly important not only in relation to quantity of goods and services consumed, but to the general economy of the country as well. This great impact on our economy was vividly demonstrated in the recent recession when increased pressure was brought to bear, by many sources including Congressional representatives themselves, on the Government for increased spending. It was rightly felt that this increased spending would provide a business stimulus, due to the additional dollars in circulation, thereby hastening economic recovery. On the other hand, such a move would markedly increase overall governmental expenditures, thus placing additional burden on the already overburdened taxpayer. Because Government Procurement is now a major issue of public policy, it is essential for every individual to learn more about its intricate workings and how the tax dollar is spent.

Federal Government expenditures for the present fiscal year will be a staggering $79.2 billion.* Of this total approximately $17.5 billion** will be spent directly by the Air Force. As this expenditure by or under the direction of the Air Force represents approximately 22% of the total federal budget, the role played by the Air Force in the Government procurement scheme assumes gigantic proportions.

In the furtherance of their objective, which is namely to procure aircraft and missiles of the latest design and to maintain our technological edge in the struggle for leadership in the air, the Air Force utilizes a complex system of procurement designed to insure "More Air Force per dollar."

* 10
** 11
Among the various types of contracts necessary to procure the men, materials, and services required are Research and Development Contracts, Supply Contracts, and Facilities Contracts. Each type has a specific purpose in the overall procurement scheme.

As it would be impossible to cover all phases of this complex system within this single study, it is the intent to point out possible economies within the small, but important, field of Government Procurement, that of the Air Force Facilities Contract. By definition, "Facilities Contract means a contract between the Government and the Contractor providing to the Contractor existing Government Facilities and/or funds for the acquisition of facilities for the production or development of USAF material and services."

The basis for original inception of this type of contract is that "It has long been the duty of the state to do what private enterprise will not or cannot do." Consequently, because current production requirements for highly specialized products required by the Air Force cannot be produced economically or expeditiously by private industry, it is necessary for the Government to supply machine tools, equipment, and buildings or funds to acquire same, as required, to private contractors in order to meet Air Force delivery requirements. This, it should be noted, is not only true as regards the Air Force, but is also true of other departmental agencies as well. For purposes of brevity, our remarks herein will be confined strictly to those relating directly to the Air Force.

As the amount of Air Force business grows, so does the utilization of the facilities contract. It is needless to say that without a program of this type we would not be able to maintain our leadership in the air, which is of critical importance if we are to retain our bargaining position for world peace.

* 16, p. 1301
** 4, p. 171
However, as in any vast network of rules and regulations, there are certain economies which could be realized if time and effort is expended in critical analysis and evaluation. Many areas of this procurement program would lend themselves to organization along the lines of private industry, meaning substantial direct cost savings not only within the procurement process itself, but also in the final purchase price of the item to be secured. Whether purchasing is accomplished by the government or private industry, the desired result is the same: to procure the right quantity, of the right quality, at the right time, for the right price.*

It is the purpose of this study to direct attention specifically to those areas within the Air Force Facilities Contract procedures where revisions to the present Air Force Procurement Regulations and Procedures would result first; in direct cost savings for administration of the program and, second, in lower unit purchase prices.

Continual efforts in this direction are being made both within the Air Force and from organized business groups. The largest of such business groups are perhaps the Machinery & Allied Products Institute and National Association of Manufacturers, composed of leaders in a vast number of companies, who retain full time offices and personnel at strategic locations for close liaison with governmental decision makers. Many changes proposed in government contract or procurement regulations are first submitted to these organizations for review and comment; however, suggestions and comments made by these organizations are not necessarily incorporated in the revised procedures.

The Congress of the United States also plays an important part in overseeing all procurement policy regulations, but, due to their burden of work, cannot follow in detail every proposed item. Perhaps the most progressive step in this

* 2, p. 13
direction during recent years was the creation of the "Hoover Commission" in 1955, which was charged with the responsibility of analyzing the Federal Government and suggesting revisions or reforms to bring about necessary economies in its operation.

By nature of its broad duties, the "Hoover Commission" was not able to cover in detail any particular phase of the Federal Government, but they did touch upon broad overall procurement policies which would have a resultant effect upon the Air Force Facilities Contract.

In view of the fact that this investigating organization officially ceased operation on October 20, 1958, it is now possible to list its accomplishments in the government procurement field which have been accepted by Congress or are still pending as follows:

**Top Proposals Accepted***

1. Set up a government-wide program to reduce paperwork (which used to total 25 billion letters and memos a year) and cut storage costs.

2. Pay higher salaries (up to $17,500 a year) for career technicians and other government employees who have professional and scientific skills.

3. Create a Federal Career Executive Board to offer greater career incentives to competent management personnel.

4. Overhaul military procurement procedures to permit the services to buy jointly such common items as fuel and clothing (the commission regrets, however, that this is not mandatory on the services).

**Top Proposals Pending***

1. Eliminate duplicate military and civilian jobs in the Defense Department (the commission found 16,000 instances of duplication, but admitted that even if this recommendation were adopted, enforcement probably would be difficult).

* 12
2. Set up central management of all government real estate (some 838 million acres and 2.4 billion square feet of floor space), and sell all unneeded property.

The above listing only includes top proposals which directly affect the Air Force Facilities contract. Many other notable accomplishments were made by this commission in spite of opposition from many quarters but need not be detailed herein.

Unfortunately, it is felt that establishment of a similar commission to delve further into this problem is a remote possibility at this time. Mr. Hoover, who spearheaded the commission, is now 84 years old, and without his prestige, it is doubtful whether a new commission could hardly get off the ground.

In this report, a comparison of the present Air Force procurement setup for a facilities contract, including organization, personnel, procedures, and controls, will be made with standard textbooks and two commercial business firms in Worcester, Massachusetts area who are engaged in the same type of procurement, that of securing capital, goods, and equipment. For increased emphasis in the area where savings by revision of regulations will allow lower purchase prices, a case study will be utilized by analyzing an actual Facilities Contract now in operation.
CHAPTER I

THE FACILITIES CONTRACT

Scope

Before approaching the subject of possible cost savings in Air Force Facilities Contracts, it is essential that a complete understanding of such contracts be acquired in order to distinguish them from other types also in use. The Facilities Contract has already been defined in the Introductory Section of this report, but it is necessary to note that its scope encompasses all the activity involved in making Government owned industrial facilities available to an Air Force Contractor and in supervising their use, from the time it is determined that such facilities are required until the time the contractor is relieved of all responsibility with respect to them.*

This type of contract is only issued, for the Air Force, by the Industrial Resources Division of Headquarters AMC, Dayton, Ohio upon formal written application by the contractor. It is not necessary to detail the procedures to be followed in applying for and securing a facilities contract as this is beyond the scope of this study; however, information in this respect may be secured in Section XIII, Part 24 of both the "Armed Services Procurement Regulations" and the "Air Force Procurement Instructions."

Facilities To Be Provided

The type of facilities allowable under a Facilities Contract varies, depending mainly upon contractor need and ownership of the plant at which facilities are to be provided.

In a contractor owned plant, the following facilities may be provided by the Air Force:**

1. Machinery, including standard, special, or single purpose machine tools.

* 16, p. 1302
** 16, p. 1392.3
3. Equipment, including welding machines, heat treating equipment, and plating or anodizing equipment.
4. Building Installations - Mechanical, consisting of cranes, hoists, ventilating and exhaust fans, and conveyors.
5. Laboratory and testing equipment, which are of standard manufacture only, including electronic testing machines, hardness testers, lab. ovens, metallurgical spectrographs, optical comparators, and standard gages and inspection equipment.
6. Furniture and equipment including office equipment, standard steel work benches and shelving, standard steel lockers, cafeteria equipment, (excluding dishes, pans, etc.), hospital equipment, time clocks, and card racks.
7. Portable tools including riveters, impact wrenches, screw drivers, drills, etc., only if they are standard commercial types with life in excess of 4 years on a 2 shift, 5 day week basis and unit cost in excess of $500.00.
8. Material handling and automotive equipment consisting of fork lift trucks, warehouse tractors, and fire trucks.
9. Installation costs for all of the above referenced items.

In a Government owned plant all of the above listed facilities may be provided as well as the following additional items;*

10. Land including clearing, grading, and drainage.
11. Buildings and test cells. (Major construction jobs are, however, contracted for, not by the

* 16, p. 1392.3
Air Force, but by the Federal Works Agency and the Corps of Engineers of the Army.)*


13. All building installations not mechanical consisting of plumbing, ventilation, power wiring, sprinklers, heating, lighting, and air conditioning.

14. Land installations (on site) consisting of paving, roadways, railway sidings, utilities, and fencing.

15. Standard commercial trucks.

**Industrial Reserve System**

The Air Force, like the other Branches of Service, maintains an Industrial Reserve System which consists of a machinery, equipment, and vehicle pool for supplying same under Facilities Contracts. The Air Force reserves the right to supply to the requesting contractor any item of equipment available in this Industrial Reserve System if it will meet the stated needs of the contractor.

The machinery and equipment in the system is acquired through Air Force Pool Orders with machine tool manufacturers, from Air Force Contractors who have declared the item surplus to their particular needs, or through transfer from other Defense Department agencies.

**The Facilities Lease Contract**

The Facilities Contract should be distinguished from the Facilities Lease Contract. In the former case, the contract provides only for acquisition of the facilities to be used by the contractor. Once these facilities have been acquired, some equitable arrangement must be made between the contractor and the Air Force for their extended use. For this purpose, the Facilities Lease Contract is utilized which sets forth the specific use the equipment is to be

* 3, p. 11405
put to, the term of use, and compensation to be given the Air Force, if any, for their use on production work. Administration of this type of contract is radically different than for a pure Facilities Contract and as such will not be discussed in this study.

The Facilities Contract may be any one of the many types of contracts categorized as fixed price, price redetermination, cost, cost plus incentive, cost plus fixed fee, time and material, etc., however it is generally of a cost nature. Consequently, discussions regarding the Facilities Contract cannot be confined to any one of the above types and must encompass considerations which are common to all. Each type of contract is a story in itself and would require a complete thesis to fully discuss all management considerations required in the administration of it. As we are not primarily concerned here with the actual workings of a particular contract but rather with the administration of the Facilities Contract system itself, discussions will be confined to those facts pertaining only to the system.

**Method of Operation**

Actual procurement under a facilities contract is normally carried out exclusively by the successful contractor. Hence, the role of the Air Force is not that usually thought of in the purchasing sense, but one of overall administration and approval of contractors procedures. The contractor must first make the purchase and then seek reimbursement from the Air Force on the basis that the procurement was necessary, justified, in accordance with existing procedures and regulations, and in the best interests of the government. Consequently the entire system, including all personnel, retained by the Air Force for administration under a Facilities Contract is not devoted to the actual purchasing process itself but is designated to act as a "watchdog" to insure compliance with the intent and the letter of the contract.
CHAPTER II

ORGANIZATION

In order to accomplish its staggering task of channeling appropriated dollars to the proper outlet where they can be spent, the Air Force maintains an organization which is indeed larger than that which would be maintained by a private concern accomplishing the same result. This is understandable in that expenditures made by the Air Force, or any governmental agency, are not only concerned with procurement but with political considerations as well. The dollars being spent are not those of private investors but are public funds secured through income taxes, corporation taxes, etc. and as such greater control must be exercised to protect the public interests.

Lines of Authority and Responsibility

Exhibit I, included in this report, indicates the Air Force Procurement organization from its highest level, the Secretary of the Air Force, to the first intermediate level, Headquarters AMC located at Wright-Patterson Air Force Base, Dayton, Ohio. The function of this portion of the Air Force procurement organization in relation to the Facilities Contract is to either initiate a request to establish same, when it is determined that a plant is required to accomplish some phase of production which cannot adequately be handled by existing private industries, or to give final approval to requests initiated by private contractors which have been received by the Air Procurement Districts and the Air Material Areas.

The Secretary of Defense is, of course, a member of the President's cabinet and the other subordinate offices listed are located at the Pentagon, Washington, D. C. Because of this, it is possible to feel the pulse of the public through contacts with the President, Congress, and lobbyists.
in Washington and it is only fitting then that all decisions as to overall policy are made at this level. Matters pertaining to details in carrying out the broad policy decisions are relegated to Headquarters, AMC.

Local Purchase Method

At this point it should be noted that all Air Force procurement is accomplished by one of two methods - central procurement or local purchase.* As the Facilities Contract is handled through the central procurement system, the local purchase system will not be discussed except to state that individual Air Force installations buy their own requirements under this method. Supplies and services bought under the local purchase method include those which are generally of the type that are readily available on the open market, are less complex than those which are centrally procured, and are more of a commercial than purely military type. Included are "small purchases," minor construction, local repairs, and services of a housekeeping nature.*

Central Procurement Method

Under the central procurement method, the following types of items are procured, in addition to Facilities Contracts; large or complex items, such as missiles, aircraft, aircraft engines, major components of the foregoing, electronic equipment, support equipment, basic research, and applied research.*

Geographic Location of Administrative Offices

Exhibit II indicates by location the organization utilized for issuing and administering the facilities contract under the central procurement system. Ranking, by authority, is as follows: First, Headquarters, AMC, Wright-Patterson Air Force Base, Dayton, Ohio; Second, all Air Material Areas; and last, all Air Procurement Districts. All rules, regulations and contracts are passed down in

* 13, p. 43
PROCUREMENT INFORMATION OFFICES OF AIR MATERIEL COMMAND

AIR PROCUREMENT DISTRICT OFFICES.

AIR MATERIEL AREA HQS.

SMAMA: SACRAMENTO
SBAMA: SAN BERNARDINO
OCAMA: OKLAHOMA CITY
WRAMA: WARNER ROBINS
MAAMA: MIDDLETOWN
this order while requests initiated by private contractors
must follow the pattern in reverse order for approval.

Departments

Headquarters, AMC, the Air Material Areas, and the
Air Procurement Districts are all departmentalized by
function to be performed. For example, there is a Contract
Section in the Air Procurement District which reports to
a Contract Section in the Air Material Area, which in turn
reports to a Contract Section at Headquarters, AMC. This
generalization can be used for all of the following depart­
ments which are to be discussed, except the Audit Branch.

The major departments which are directly connected
in the administration of a Facilities Contract are the
Contract Section, the Production Section, the Property Branch,
and the Quality Control Division which are departmentalized
as discussed above and the Audit Branch which is a direct
representative of the Auditor General, USAF.* However,
regardless of the physical location of these departments,
each is autonomous in its own sphere of responsibilities and
the procuring contractor under a Facilities Contract is faced
with the necessity of determining exactly what these respon­
sibilities are, and must then channel its problems to the
proper department.

Briefly, the various functions and responsibilities
of these departments in relation to the Facilities Contract
are as follows:

Contract Section - To designate an Administrative
Contracting Officer who will**

1. Determine allowability of costs, under the "Armed
   Services Procurement Regulations," Section 15.
2. Approve contractors invoices for payment.
3. Review and approve prices of spare parts under

* 14, p. 38
** 14, p. 8
provisioning appendixes, final spare parts exhibits, or otherwise.

4. Approve insurance costs under approved insurance plan.

5. Review and approve wage and salary schedules in connection with cost reimbursement type contracts.

6. Approve subcontracts and purchase orders to vendors in accordance with the provisions of the contract being administered.

7. Determine responsibility of contractor for disposition of surplus and obsolete Government Property and approve sales when made by contractors.

8. In case of loss, destruction, or damage to Government property, determine liability of contractor, if any.

9. Prepare findings of fact and issue final decisions on nonallowable items of cost under the "Dispute" article.

10. Approve items for acquisition or performance.

11. Authorize the use of facilities in accordance with the terms of the contract.


13. Enforce the proper maintenance and protection of Government owned facilities covered by facilities contracts and leases.

14. Generally make determinations and give approvals which are required by the provisions of the Contract and perform such other duties as required.

Production Section - Will assign a production specialist or project officer who will*

1. Insure that contractors production is not re-

*14, p. 50
tarded due to technical difficulties that may be experienced with contractual requirements.

2. Approve facilities to be provided on the basis of appropriateness to meet contractors production requirements.

3. Insure that the contractor is using the equipment enough to justify retention and that such use is on approved contracts.

4. Assist contractor in securing facilities in accordance with vendors delivery requirements.

5. Review contractor's requests for items to be declared surplus.

**Property Branch** - To designate a Property Administrator who will*

1. Insure compliance with contract requirements relative to Government Property.

2. Insure fulfillment of all obligations imposed by the Air Force Manuals and implementing instructions.

**Quality Control Division** - To designate a Quality Control Representative who will**

1. Insure contractor's inspection and acceptance of supplies for the Air Force are in accordance with standards of Quality prescribed by the Government.

2. Verify condition of machinery, equipment, etc. as reported by the contractor.

3. Review and approve contractors maintenance program and procedures.

4. Make all decisions in regard to technical requirements.

5. Insure that Air Force contractors establish

* 14, p. 44
** 14, p. 48
and maintain an acceptable Quality Control System.

Audit Branch - Assign an auditor who will*

1. Audit expenditures made by a contractor for which the latter is requesting reimbursement under the terms of the contract.

2. Render technical assistance to the administrative contracting officer with respect to the audit aspects of the contractors operation.

The Administrative Contracting Officer has by far the closest relationship with the procuring contractor, and is required, under the terms of the contract, to render all decisions affecting funds. However, the Production Specialist, the Property Administrator, the Quality Control Representative, and the Auditor who are instrumental in making decisions in their own particular sphere of responsibility are not under the supervision of the administrative contracting officer, but report to their respective department chiefs.

Changes Required

This somewhat comprehensive study of the actual organizational channels utilized for Air Force procurement under a facilities contract, as well as the duties thereof, suggests a number of changes which can be made to overhaul the system with a view to a clearer definition of authority and uniformity of practice and to avoid unnecessary pyramiding of checks, reviews, and other administrative control devices.

Administration is concerned with converting policy into practice. At the head of each division is a person responsible for the division and in possession of authority for supervision and control. Each division may be organized into a framework of departments with an operating head of each department.** This is true to a limited extent as regards the Air Force organizational set-up, however the

* 14, p. 38
** l, p. 51
head of the division or the coordinator of ideas, being at Headquarters, AMC, is remotely removed from the actual operating departments, which are the Air Procurement Districts. In between, in addition to a great number of physical miles, are the Air Material Areas which serve merely as an additional review or check upon the work of the Air Procurement Districts. Certainly, if the personnel utilized at the Air Procurement District level are judiciously chosen, there would be no need for an intermediate check or review. It is not proposed that the Air Material Area be eliminated as it serves a distinct purpose under supply contracts and personnel administration, but those departments specifically devoted to the Facilities Contract could be eliminated with a resultant decrease in personnel. There would be no additional burden assumed by either Headquarters, AMC or the Air Procurement Districts as coordination could be accomplished directly between them.

Both the Wyman-Gordon Company, Worcester, Massachusetts and the Bay State Abrasives Company, Westboro, Massachusetts utilize organizations for procurement of capital equipment items where top supervision coordination is the next step above the various departments who enter into the decision to procure an item. The only check placed upon the actual procurement itself is by the audit department, although the engineering departments do review bids not for prices quoted but as to whether specifications have been met.

The duties of the various departments within the Air Force organization and lines of authority and responsibility are not clearly defined in any publication which is readily accessible to the procuring contractor and needless time and effort is spent in determining what action is required by what department. Even the specific duties listed in this report, which were taken from a publication not usually available to the private contractors, present
areas of overlapping responsibilities and authority that must be straightened out during operation of the contract.

A good job evaluation system, such as is now in use by the Wyman-Gordon Company and the Bay State Abrasives Company, which requires a basic job description would be invaluable if said job descriptions were made available to the operating contractors. In this way the duties and responsibilities of each department would be readily apparent and much time, effort, and paper work in determining these facts, under contract operating conditions, saved. Determinations required for expediting matters could then be referred to the proper department with assurance that proper action would be taken as rapidly as possible.

One further step which could be taken to streamline the organization would be to establish the production department, property section, and quality control branch as staff departments reporting on all matters to the contracting officer. It would be advisable to leave the audit department under present jurisdiction as this is the most effective check and review on all departments and as such should be completely divorced from control of the operating departments.

The above suggestion would tend to centralize procurement and related functions under the Facilities Contract. It would be advantageous both to the Air Force and to industry to deal with a single office in settling all problems which arise and would certainly decrease administrative costs to the Air Force.
CHAPTER III

PERSONNEL

Importance of Competent Personnel

The success or failure of the government's procurement program under a facilities contract must depend finally upon the people who administer that program. Therefore, no aspect of the Facilities Contract is of more importance. The topic of Personnel must include consideration of both military officers and civilian employees of the United States as both occupy positions previously discussed in Chapter II and no discrimination as to employment is made between them. The only exception to this rule are the cabinet officers, in this case the Secretary of Defense, and the heads of agencies such as Secretary of the Army, Navy, and Air Force, and their aides, who are civilians and are appointed by the President. This latter group provides the top level direction for Government activities not only within the Facilities Contracting field but in a host of others, and are politically responsible to the electorate. Hence, no consideration will be given to this level of administration as any changes made in this area would have to be of a personal nature initiated by the President because of public or personal sentiment.

As both military officers and civilian employees perform identical functions with the same organizations, although it may be in a different geographical location, they should be considered as one group in any discussion relating to personnel. However, there are minor differences which will be discussed as each major phase of the personnel problem is defined.

The Facilities Contract awarded to a contractor has two basic parties to the instrument - The United States of America and the contractor. Each Air Force representative
referred to in Chapter II, the Contracting Officer, the Property Administrator, the Quality Control Representative, and the Auditor, in their own realm of responsibility, are to assume in the name of the United States government its position as a party to the contract. Hence the stature of these people must be such as to demand respect by all levels of management of the contractor as this will be the very same respect in which the contractor holds the United States Air Force. This point is clearly recognized by the Air Force as indicated in the following instructions issued to their Contracting Officers.

"Major Contractors to the government are usually corporations that are staffed by a full complement of well-paid experts - lawyers, comptrollers, treasurers, cost accountants, engineers, auditors, and whatever other talent is required to conduct successfully a large manufacturing business.

The contracting officer is usually outnumbered at austere and dignified meetings with the corporate officials. He must cope with a galaxy of special abilities, and argue major issues on a par with each of the special talents.

The contracting officer, himself, may not be a lawyer, an accountant, a cost expert, an engineer, or any of the specialists - and he cannot be all - but this does not detract measurably from his ability to deal with them evenly and on their own ground."

Truly then, these people must be of exceptional personal stature and ability. It is the intention of this section of the report to analyze the existing personnel system to see if proper steps are being taken to secure and retain this required talent.

**Private Industry Appraisal**

At this point it would be well to preface the remarks to be made on the Air Force personnel system with

* 14, p. 1
the general feeling of private industry which is: "It is our belief that the great majority of government employees are competent, industrious, and dedicated to the interests of the United States. If there are personal or professional shortcomings in the performance of certain government contracting personnel - and the great weight of evidence indicates this to be the case - the fault, we think, lies in the system rather than with individual employees."

**Pay Scales**

The first consideration which is of utmost importance in securing men of the proper caliber is the pay scale offered by the Air Force to men who are expected to fulfill the requirements of the above jobs. As no specific case can be cited as to the exact pay scale for this personnel, it will be necessary to establish the range of pay scale available for this type of work. The military officers range from 2nd lieutenant to major with a pay range from $4,200.00 to $8,400.00. Civilian employees, who are within the coverage of the civil service system, range from classification GS-10 to GS-12 with a pay range from $6,000.00 to $8,200.00. As a basis of comparison, the contractor personnel, with whom the Air Force personnel must deal, are usually in the salary ranges of $10,000.00 to $20,000.00 per year, and in some cases more.

As can be seen from the above comparison, there is a radical difference between the compensation received by the two parties to the same agreement who are to deal with each other as equals. It is true that a concrete conclusion cannot be drawn from the above which would indicate that one type of personnel is inferior to the other, but it is also true that an individual will tend to seek a position which pays commensurate with his ability to perform. Merely in a sense of fairness or justice, the pay ranges should be identical as it is unfair to exploit an individual's

* 5, p. 30
desire to serve his country by offering an annual wage which is less than that which is adequate for proper compensation. Of great danger, is the fact that the lower pay scales will tend to drive the able, the ambitious, and the strong willed out of the Air Force contracting field.*

Revision of pay scales for annual salaried employees (as well as Military Personnel) is a function reserved by the legislative branch of government - the Congress. Nevertheless, Congress makes considerable use of the facts and recommendations provided by the executive branch.** It is here that a realization of the overall problem must arise and legislation initiated whereby pay scales may be made commensurate with private industry. Unless and until this is accomplished, public opinion notwithstanding, the Air Force personnel system will tend to suffer and adequate protection of the best interests of the government, will be in jeopardy. It is firmly believed that higher pay scales will attract competent personnel, who will be capable of making those decisions which will result in lower ultimate procurement costs under a Facilities Contract.

Selection of Personnel

Another consideration which is of utmost importance if the proper personnel are to be secured for these positions, is the method utilized by the Air Force for selection of its personnel. Here there is a slight deviation in the methods available for military officers and civilian employees as the military is restricted to those individuals who have specifically decided upon a military career or are temporarily in service, not of their own free choice. Thus, the number of military officers available is very restricted.

* 5, p. 31
** 17, p. 5
Civil service, on the other hand, offers a civilian career which is considerably more attractive and thus can command a greater number of applicants.

Military personnel are utilized in those positions where it is indicated they are most suited. In many cases, the officer himself will request transfer into a position he knows is vacant although in the majority of cases request is made by the Air Procurement District or Air Material Area military chief. There is a tendency in this type of system to foster utilization of military officers in positions vital to the Facilities Contract merely because it is expedient, they are available, or because the duty appears attractive. Experience and training, both military or civilian, may or may not be considered when the appointment is made. In addition to this, the military system itself has built into it, the undesirable feature of assignment rotations. Hence, after a military officer has spent time to acquire experience and knowledge on the Facilities Contract, he will be transferred, not necessarily into a position requiring the same talents or skills.

Civilian employees are, however, under the jurisdiction of the Civil Service Act of 1883 which is supplemented by Presidential Executive Orders and detailed regulations issued by the Civil Service Commission. Under the Civil Service Act, selection is left up to the respective department head exclusively. A common mistaken idea is that all positions are filled by competitive examination. This is not true although this is one avenue open to the department head, and is probably the one most commonly used. Other methods are direct hiring, transfer, reassignment, promotion and reemployment.**

It is a recognized tendency for department heads

* 17, p. 2
** 17, p. 6
to rely too heavily on the employees within their immediate, limited purview as the sole source for selecting persons to fill higher positions. This practice may fail to consider better qualified persons eligible for the promotion since the area of consideration is so narrow.

Basically however, filling a position in the Air Force is the same as in any business organization. The main difference is that once the selection has been made, it is extremely difficult to change in view of government regulations which have been enacted specifically to insure job tenure. In a private business organization the penalty for inefficiency is dismissal immediately, whereas dismissal from the Air Force position is a long drawn-out process. Therefore, all of the known skills of personnel selection should be utilized such as AVA tests (Activity Vector Analysis), careful scrutiny of background, education, and experience, and review by an impartial board of personnel experts, prior to the installation of anyone in a government job. In addition, the right to remove a civil servant for inefficiency or inability to perform the work should be strengthened and placed on the same basis as private industry. Unless some action is taken along these lines, the Air Force cannot be assured that its interests are being adequately protected under a Facilities Contract.

As detailed in Chapter I, the Facilities Contract is primarily concerned with the acquisition of capital equipment items and the construction phase of procurement. Hence, it is essential for all members of the Air Force team, as well as those of the contractor, to be familiar with these types of items. One must be familiar with the terminology and the many rules of thumb prevalent in the trade in order to accurately appraise requests for procurement and discuss, on equal ground, the merits of a given request. This knowledge can be acquired through formal schooling in an
engineering college or, as is more common, through actual experience in the field. In addition to this specialized knowledge, a good background or working knowledge of business fundamentals is required.

As this combination of knowledge is not ordinarily found in a going industrial concern, it is often necessary for the contractor to hire personnel, from outside its normal sphere of operation, to fill key positions in its Facilities Contract Organization. These people are experts in their field and normally move from job to job as the occasion demands. In this way, the contractor can be assured of up to date, accurate information which will adequately protect its interests as a party to the Facilities Contract.*

Personnel utilized by the Air Force, on the other hand, are those who have acquired job tenure through length of service and who may or may not have the knowledge required for proper administration of the contract. In many cases, as the Facilities Contract is not as common as the Supply or Research & Development types, the Air Force administrators have but a minimum of understanding of such matters. Because of this, they are apt to lean too heavily upon statements or determinations made by the contractor without making an independent check or analysis.

It is not the intention of this report to infer that such a check will indicate falsehoods on the part of the contractor, but that merely from the principles of good business practice a review or approval should be independent in nature based upon knowledge which is of a different origin than that utilized for the original determination. In this way possible mistakes can be corrected before they assume serious proportions.

**Training**

Unfortunately, training for Air Force personnel

* 18
utilized on the Facilities Contract is not on an organized basis and varies depending upon the department head. In many instances, due to the pressing day to day activities, no such training is utilized. The philosophy of government personnel training is emphasized in the following:

"The process of education continues throughout an employee's career. He learns from his supervisor, from his colleagues, and, if he himself is a supervisor, from his subordinates. Frequently his learning and improvement in his work can be strengthened or speeded up through staff conferences, by formal on-the-job courses, by special reading, or by taking courses off the job."* Two week duration Contracting Officer Schools are held periodically, the latest of which was held in December 1958 at Middletown Air Material Area in Pennsylvania; however, a multitude of items must be covered within a relatively short period making discussions of a general nature only. This is adequate as far as it goes, but due to the specialized nature of the Facilities Contract, it is felt that some formal training, either on or off the job, is essential if the personnel designated by the Air Force as their representatives are to adequately "protect the interests of the government" and be in a position to discuss with emphasis the many problems peculiar to this phase of Government Procurement.

In addition to possible revisions to the government personnel system referenced above, it is necessary to state that the system appears to be predicated upon an assumption that the people who man it are not competent to handle the Government's business without detailed review. This is indicated by the fact that most final decision-making power is reserved to Washington or to similar central offices. The ultimate result of such a

*17, p. 11
policy is to create a stultifying influence which causes the average Air Force employee to not exercise such authority as he does possess. The immediate outgrowth of this type of an influence is a tendency to increase the number of personnel required to run the system as most personnel added are merely to exercise checks and review decisions made by subordinates. As it must be assumed that competent personnel will be selected to make the original decisions, the need for more than one reviewing person should be eliminated.

Changes Required

It has not been the intent or the purpose of this study to cover every phase of the military or civil service personnel system as this would be unnecessary in a discussion restricted to the Facilities Contract. Many suggested improvements to both the military and civilian personnel system have been proposed by the legislative branch of the government, such as better retirement funds, vacation pays, travel allowances, and proper compensation for overtime. These would apply to Air Force employees regardless of the type of occupation and would not be confined strictly to remarks regarding a Facilities Contract. As these suggestions are so broad in coverage, no attempt has been made to analyze their merits. It must be stated, however, that much work can be done in this area commonly referred to as "Fringe Benefits." It is also understood that any improvement made in this area would tend to improve the caliber of personnel being engaged in any phase of Government Procurement, including the Facilities Contract.

The main attempt has been to point out those specific areas directly related to personnel administering the Facilities Contract and to suggest possible changes which could be made and which would in turn reflect cost savings in the procurement procedure.
It should be the final goal of the Air Force to select and train its personnel to have the nearest practical approximation of a buyer-seller relationship in private business with its contractors. Until this attitude is obtained, there will be waste on both sides.

Admittedly, relations between the Air Force and a private contractor are subject to a number of special considerations and because of this the possibility of finally arriving at the ultimate goal is remote. The sovereign power of the United States automatically distorts the normal contract relationship of free and equal parties. Moreover, the Government is entitled to demand a higher standard of performance than any other contractor in view of the fact that funds being expended are those of the general public.
CHAPTER IV

PROCEDURES

In an attempt to establish uniform procurement policies, procedures, and instructions for all agencies within the Department of Defense, the 80th Congress passed the Armed Services Procurement Act of 1947, Public Law 413, 41 U.S. Code 151-161.

Armed Services Procurement Regulation

As a direct outgrowth of this law, the "Armed Services Procurement Regulation" was issued by the Assistant Secretary of Defense (Supply and Logistics) by direction of the Secretary of Defense, and in coordination with the Secretaries of the Army, Navy, and Air Force, which establishes for the Department of Defense, uniform policies and procedures, relating to the procurement of supplies and services under the authority of Chapter 137, Title 10 of the U.S. Code, or under other statutory authority.*

This regulation is to apply to all purchases and contracts made by the Department of Defense, within or outside the United States, for the procurement of supplies and services which obligate appropriated funds (including available contract authorizations) unless otherwise specified therein.* Included within the scope of this regulation is the Air Force Facilities Contract.

The "Armed Services Procurement Regulation" is divided into sections, each one of which deals with a separate aspect of procurement and each section is further subdivided into parts and paragraphs. As an example of the phases of procurement which are covered are the following: Procurement by Formal Advertising; Procurement by Negotiation; Coordinated Procurement; Interdepartmental Procurement;

* 15, p. 101
Foreign Purchases; Contract Clauses; Termination of Contracts; Patents and Copyrights; Bonds and Insurance; Federal, State, and Local Taxes; Labor; Government Property; Inspection and Acceptance; Contract Cost Principles; Procurement Forms; and Armed Services Board of Contract Appeals.

This regulation may be amended, from time to time, to set forth improved procedures which reduce contract preparation time, simplify and standardize contract forms within the Department of Defense, and improve the contracting process by standardizing procedures and instructions.*

However, in spite of the fact that it is the avowed purpose of the "Armed Services Procurement Regulation" to standardize all procurement policies and procedures, each of the Defense Departments, the Army, the Navy, and the Air Force, supplements this basic Manual with instructions and interpretations peculiar to their particular branch. As we are dealing here with only Air Force Facilities Contracts, it will be sufficient to note that the "Armed Services Procurement" regulation does not cover completely the various policies and procedures of either the Army or Navy if one is concerned with this type of contract. We will, however, detail in some length the supplementary provisions published by the Air Force.

**Air Force Procurement Instruction**

The supplementation issued by the Air Force is entitled the "Air Force Procurement Instruction." The "Air Force Procurement Instruction" is issued by the Commander, AEC, by authority of the Secretary of the Air Force, delegated through the Deputy Chief of Staff, Material, Hq. USAF. It implements the Armed Services Procurement Regulation and establishes for the Department of the Air Force uniform policies, procedures, and instructions relating to the procurement of supplies and services under the authority of the Armed Services Procurement Act of 1947, Public Law 413.**

* 15, p. 102
** 16, p. 101
The AFPI, like the ASPR, is to apply to all purchases and contracts, within or outside the continental United States, for the procurement of supplies or services which obligate appropriated funds (including available contract authorizations). Unlike the ASPR, the AFPI of course only relates to those contracts issued under the jurisdiction of the Air Force.

The AFPI, like the ASPR, is divided into sections each one of which deals with a separate aspect of procurement. The section numbers, topics, parts and paragraphs correspond identically in each manual. Thus, if one wishes to determine what implementation is included in the AFPI for a particular paragraph in ASPR, he need merely refer to that paragraph number in the AFPI. In those instances where no changes have been made by the AFPI, the designation "No Implementation" is used which indicates that the Air Force will accept in toto the presentation of the ASPR. Additional sections, over and above those utilized in the ASPR are used to cover major aspects where warranted.

The AFPI is amended from time to time by publication of revised or additional pages, parts, or sections.

**Air Force Procurement Circular**

When changes, additions, or deletions are to be made to the AFPI and there is not sufficient time to issue an AFPI supplement, the "Air Force Procurement Circular" is used. This is a temporary instrument which is used only for immediate notification to Air Force personnel and contractors and will be voided upon the issuance of an AFPI supplement incorporating the change involved. These Air Force Procurement Circulars are numbered consecutively for the calendar year, beginning with No. 1.

**Department of Defense Directives and Instructions**

From time to time, as the occasion demands, the Department of Defense will issue DOD Directives or DOD
Instructions concerning procurement matters which affect all agencies within the Department of Defense. These directives and instructions will be implemented by means of the "Air Force Procurement Instructions" or an "Air Force Procurement Circular" as soon as possible after issue. These DOD Directives or Instructions are issued under any of the following circumstances:*

a) When the subject matter is classified
b) When the subject matter is not suitable for inclusion in the ASPR or AFPI
c) As an interim measure, pending subsequent incorporation in the regulation
d) When the policy or procedure is expected to be effective for a period of less than 6 months.

When the subject matter relates to one time requests for information or instructions on a particular or individual matter, memorandums may be addressed to the Secretary of the Military Departments.

Other Published Procedures

In addition to the above five basic regulations which are available in published form both to Air Force personnel and Air Force contractors (in the latter case there is a slight fee payable to the Government Printing Office, Washington, D. C.), the Air Force utilizes several other means of interpreting and refining the procedures which apply to their particular contracts. These are issued by the procuring departments at all levels of the Air Force organization previously discussed in Chapter II.

"Air Force Regulations" (AFR's) are issued by Headquarters, AMC, "AMA Letters" are issued by the Air Material Areas, and Manuals relating to details for each specific phase of the program are prepared under the direction

* 15, p. 102
of the cognizant military chief. All of these deal with specific, current questions which have raised in connection with the administration of the Air Force procurement program.

The Facilities Contract, being a phase of the overall Air Force procurement program is subject to, and affected by each one of the above referenced regulations.

The above referenced regulations are, of course, over and above the statutory law dealing with government procurement. They are merely details of how matters should be handled by Air Force personnel and contractors in order to comply with the law.

Consolidation of Regulations

The first, and most obvious comment, in regard to the existing procedures is the fact that, in spite of the expressed wish by Congress to enact one set of principles to apply to all government procurement, each individual department has taken it upon themselves to implement the basic regulations with ideas and thoughts of their own. Consequently, administration of a Facilities Contract under the Air Force might differ radically in detail from those issued by the Army or the Navy. The prime intent of the Armed Services Procurement Act of 1947 has therefore been defeated. Until and unless one comprehensive set of principles can be obtained which will lend themselves to acceptance in toto by all branches of the military, there will be confusion in the overall government procurement program.

Specifically, now, dealing only with those regulations which are intended to cover Air Force contracts, it can be seen that to determine the most current regulation pertaining to a particular phase, it is necessary to review at least eight different sets of publications by the Air Force. To further hamper the Air Force facility contractors, a number of these regulations, particularly the AFR's, AMA
Letters, and manuals, are zealously guarded by the Air Force contract administrators and are not made known to them until they have unwittingly transgressed their provisions. It is an extreme burden to have to review a large number of regulations in order to finally determine the exact course of action required, but it is an injustice to have certain information withheld until such time as it is expedient for the Air Force contract administrators to make it known. Procedures are published by most industrial companies for the purpose of providing clear, concise instructions for day to day operation which will in turn point out the most advantageous and economical manner to perform a particular task. It should be with this in mind that the existing Air Force regulations be consolidated and revised. Without doubt the Air Force would save the cost of settling unnecessary contract disputes which arise because contractors are unable to obtain readily the procedural information required either because they must wade through a number of disorganized and detached publications or because the information is not made available to them.

As a further deterrent to the Air Force Facilities contractor, the previously referred to procedures and regulations are not stable for any length of time. The Armed Services Procurement regulation was revised 35 times between 19 May 1948 and 3 January 1955 at which time it was completely rewritten. Since 3 January 1955 through 5 September 1958 it has been revised 36 times averaging one change every 36 days. The Air Force Procurement Instruction was revised 68 times between 2 January 1956 and 1 October 1957 at which time it was completely rewritten. Since 1 October 1957 through 5 September 1958 it has been revised 12 times averaging one change every 27 days. It is true that each revision to either of these regulations was usually not in itself of great significance, but it did involve a complete rewriting of from 15 to 50 pages. Thus, in order to remain completely up to
date on the latest Air Force regulations, a contractor must spend both time and money to both insert the revised pages in the proper places and to completely read the subject matter contained therein.

Recently, the Air Force has recognized the mountainous task involved and does now indicate on their revisions, those specific points which have been changed from the previous edition. Regardless, the task is still a large one which is ultimately paid for by the Air Force through the purchase price of material and equipment they are procuring. More significant yet is the fact that many potential vendors of the Air Force are frightened away from contracting with them as they do not have the personnel available who can keep up with and interpret the regulations properly. Thus the Air Force is apt to pay more for an item because a contractor who could supply it at a lower cost does not wish to bid because of the paperwork involved.

**Publishing Economies**

In addition, the time and effort of many people in the government and the Air Force is devoted exclusively to rewriting the regulations. The cost of printing and paper is an additional cost which assumes large proportions. Although it must be assured that sufficient flexibility is left in the Air Force Procurement regulation system for change, it is not unreasonable to expect changes to be of an infrequent nature which would eliminate the need for a large staff of procedure writers. Another cost which could be saved by stabilizing the procedures is that which is incurred due to the many reviews which must be made of a procedural change before it is issued in its final form. Less changes would allow operating personnel, who must review the procedure, to devote more time to more important tasks.

**Changes Required**

It must here be stated that the Government does
charge a nominal fee of all contractors who wish to purchase these regulations complete with all revisions. However, because the charge does not cover in full the actual total cost involved in preparing the changes and these changes must be issued at no charge to all government personnel involved, this service is indeed not self-supporting financially.

The Air Force Procurement Instruction is a volume of approximately 1500 pages which implements the Armed Services Procurement Regulation, a much smaller book. It is filled with legal jargon designed to cover minutely every phase of the Air Force Procurement program, but herein lies a fundamental weakness of this publication. The very tenor of the document bespeaks an attitude of suspicion toward industry which is unhealthy and unjustified. As with any set of regulations which is intended to cover in detail all phases of a subject, there are loop-holes and differing interpretations which lead to contract disputes and the consequent high costs of administration.

It should be recognized that it is impossible to cover every detail of the entire government procurement program in one publication. Therefore, the procurement procedures and regulations should be reserved for indicating overall policy objectives and, in outline form, the manner in which these objectives are to be attained. The administrative details of the system should be left to the discretion of the operating contractors, who have the experience and know-how to choose the most economical and efficient manner possible.

Although the previous discussion has been based upon procedures and regulations which affect all phases of the Air Force procurement program, it is necessary that this be considered in any study regarding the Facilities Contract. The Facilities Contract is a special type of Air Force procurement subject to special considerations but to determine
what these special considerations are, it is necessary to wade through the regulations and procedures previously referred to and to sift out that information which is applicable.

No attempt has been made to analyze the procedures themselves, as this will be accomplished later in this study. It is sufficient to note at this time that there certainly are many economies which can be made merely in publication of the regulations which would assure lower overall costs of contract administration.
CHAPTER V

ADMINISTRATIVE "WATCH DOGS"

In order to insure itself that the personnel directly connected with the Air Force facilities procurement program are performing their jobs in accordance with existing regulations, the Air Force utilizes four (4) different organizations for checking purposes. Two (2) of these organizations, those of the Inspector General's office and the Auditor General's office, are directly under the supervision of the Air Force higher echelons. The other two (2) organizations, that of the General Accounting Office and Special Congressional Committees, are entirely separate from the Air Force organization itself and act as a double check against procurement actions.

Audit Branch

The Audit Branch of the Air Force was briefly referred to in Chapter II under the overall Air Force procurement organization. Specifically, however, all audits of Air Force contracts are accomplished by representatives of the Auditor General, USAF. In those cases where audit cognizance has been assigned to the Army Audit Agency or the Navy Cost Inspection Service, by coordination with the Auditor General, audits of Air Force contracts are accomplished by representatives of such cognizant order service. In other words, the Air Force may assign the task of audit to either the Army or Navy wherever it is more economical or expeditious to do so.

Where Air Force contracts, including facilities contracts, are concerned, the assigned auditor is responsible to the Auditor General through the Chief of the Audit District and is expected to adhere to the procedure and instructions issued by or applicable to the Auditor General. The assigned auditor is completely independent of the contracting officer.
and other air material area administrative personnel in the conduct of his office. However, the auditor is enjoined to assist the contracting officer to the maximum extent as well as to adhere to the highest personnel standards in conducting the audit and to exercise unbiased judgement in making his determinations and recommendations.*

The recommendations which auditors use to determine the allowability and propriety of costs and expenditures are those in Section XV, ASPR entitled "Contract Cost Principles", as well as the principles and procedures issued in directives by the Auditor General.

We therefore see that the audit agencies which are to approve all expenditures made by a contractor are completely separate from the other Air Force administrative officers and may, therefore, act on their own initiative under regulations written specifically for this purpose.

The Facilities Contract administrator does not have to abide by decisions made by the auditor and may reverse said decisions after careful consideration of the facts. However, this is more theory than practice in that the administrative officer can open himself to severe criticism if he does not abide by the decision of the auditor.

Inspector General USAF

The second of the major agencies who exercises general "Watch Dog" powers is that of the Inspector General, USAF. Personnel attached to this office are resident at the various air material areas and major procurement sites throughout the United States. Each representative in this office is charged with the responsibility of overseeing all phases of the Air Force contracting program in its particular geographical area. Although not primarily concerned with contract expenses, this organization includes them among the various phases of the procurement program coming

* 14, p. 38
under their jurisdiction. Included are administration of the contracts, personnel, property control, and any other phase which might offer any possibility of controversy.

Periodically, representatives from this office will visit every Air Force contracting point within their geographical area to review all phases of the program. Any deficiencies or recommendations made by this office are transmitted through Headquarters, AMC for correction.

**General Accounting Office**

The third and perhaps the most powerful agency established for checking is the General Accounting Office. The General Accounting Office (GAO) is the representative of the Comptroller General. The Comptroller General is charged, by statute, with the duty of auditing disbursements by the Government and adjusting and settling claims by the Government or against it. The decisions of the Comptroller General are, for all immediate purposes, final unless he can be persuaded to modify them. The only other recourse is a proceeding in court against the Government, which may be a protracted process. Formerly, the GAO performed all of its duties in Washington, D. C., but in order to decentralize its work, it has established regional offices and assigned representatives to perform at the site (usually the contractor's plant) the review of reimbursements made under Government contracts. The function of the GAO, speaking generally, is to prevent unauthorized payments of public moneys.

The essential characteristic of GAO procedure is "post audit", that is the GAO re-examines the situation after the contractor has made the expenditure and has been reimbursed. In some cases, such re-examinations come long after the transactions have been completed. In most cases, representatives of the GAO are assigned to the contractor's plant to audit the payments soon after they are made, a procedure known as "GAO audit procedure" or "site audit".
If the contract is lawful and specifically authorizes a particular payment, it is not the function of the GAO to challenge the payment, even though it may believe that the contract provision is unwise. For example, the GAO may think that the buyer was unwise to buy a certain type of aircraft or that the stipulated unit price was too high, but it recognizes that, if the contract was lawfully made, these questions are outside its jurisdiction.

Apart from any question of statutory authority, the Comptroller General has the power, in the case of a payment which he believes to be not authorized by the contract, to suspend the accounts of the finance officer who made the payment.

The finance officer is personally responsible for improper payments which he makes. Accordingly, when a payment is suspended, the finance officer calls on the contractor to refund the suspended payment. This is usually accomplished by deducting the amount from the next voucher presented by the contractor. Since the action of the Comptroller General can be reviewed only in the courts, it is of utmost importance that the views of the General Accounting Office be taken into consideration, not only during the preparation of the contract by describing some specific allowable items of cost contained therein, but also in administration of contracts.

Because of the risk of disallowances, the contractor may ask for an advance decision before making an expenditure. Representatives of the General Accounting Office will not give advance rulings to the contractor and will not render a formal decision until the contractor has actually made the expenditure and is seeking reimbursement. However, the Comptroller General will, in some cases, give the Secretary of the Air Force an opinion on a statement of facts before the contemplated expenditure is made. When such an advance
decision is requested, the Finance Officer will submit the question to the Comptroller General. Such advance decision, when given by the Comptroller General, is binding on him according to provisions of 31, U. S. Code 74.

Usually the Comptroller General will refuse to give an advance decision in cases where the General Accounting Office has representatives engaged in making a resident audit at the plant.

For purposes of guiding the Air Force Administrative Officers, all previous decisions of the General Accounting Office are published and may be referred to if specific questions arise. It is cautioned that in reading decisions of the Comptroller General care must be taken not to generalize from rulings based on the specific language of a particular contract of another service especially where the provisions of Air Force contracts may be substantially different.

Congressional Committees

The fourth method utilized for checking administration of contracts are Congressional Committees. Although exceedingly powerful, these are relatively unimportant in the overall Air Force procurement scheme due to the infrequency in which they are encountered in the normal procurement operation. Congress has a great complexity of major national issues confronting them and as such cannot devote sufficient time to the procurement problems. Only when a specific point is brought to the attention of the legislature will Congress take action and then only if it is serious enough to endanger the interest of the public. Consequently, seldom is this method encountered and the administrative personnel of the Air Force on a facilities contract need worry little about its intervention.

However, if the occasion arises where a Congressional Subcommittee initiates an investigation, it is apt to be of a
most damaging type. Special hearings and public hearings are utilized which tend to sensationalize the proceedings and produce differing publicity opinions.

**Analysis of Watchdog Agencies**

In summation, there is evidence that procurement has become today the servant of audit. Certainly audit is a necessary, even crucial part of procurement but, however, when audit has provided an Air Force Administrative Officer with that data upon which he may rely for intelligent decisions, its job should be done. It should not be used as a Court of Last Resort in the field of procurement. True, every industrial concern utilizes an audit agency which is separate from its operating organization. However, this auditor's proper sphere of activity is limited to the verification or clarification of factual or established data. There should therefore be no reason for opinions, estimates, or forecasts of the type now being made by the Air Force audit agency. In regard to the General Accounting Office which has the broadest most overall power of all the "Watch Dog" agencies, it should be understood that this power was intended to be used only where evidence of fraud exists or where an executive agency has inadequate procurement or audit procedures.

**Operation of Agencies**

As it now stands, a contractor with the Air Force may, in the course of contract performance and before final payment, deal with separate levels and layers of administrative personnel in a military department, have his books examined by a military audit agency, and have his profits, if any, reduced by the Renegotiation Board. Having run this gauntlet the contractor must still face the possibility that the General Accounting Office may elect to undertake a further examination of his books and records.* In addition to this

* 6, p. 18
uncertainty as to the finality of any transaction with the government, the contractor encounters in his dealings with the administrative officer irresolute and indecisive action in contract administration engendered in part by fear of ultimate review and reversal by the General Accounting Office. The latter is perhaps the most unfortunate effect of the General Accounting Officer's power of audit.

In general it is felt that the agencies which are used for checking of contracting administration in the Air Force should be restricted to a maximum of two, the Audit Agency within the Air Force itself and the General Accounting Office, as a representative of the legislative branch of the government. In this way adequate protection would be provided to the taxpayers but it would be possible to eliminate a great deal of personnel now engaged in checking activities only. In addition, the powers of the General Accounting Office should be restricted in relation to the length of the period following final payment during which the contracting records are subject to their audit, and thus the period of uncertainty to which a contractor is subject.

In practice, the present across-the-board power of post audit by the General Accounting Office is restricted due to the fact that the limited number of General Accounting Office personnel now available makes its post audit a highly selective process.

It is also felt that closer liaison should be established and maintained between the General Accounting Office and the Executive Procurement Agency. In this manner, a great deal of work being performed now by the General Accounting Office could be eliminated. A coordination and streamlining of these agencies would go far in decreasing the overall administrative costs of the Air Force Facilities Contract.
CHAPTER VI

OTHER CONSIDERATIONS

Although the more important aspects of the administrative organizations and procedures have been covered in the previous chapters, there are other considerations which should be investigated in order to eliminate unnecessary, wasteful, and consequently costly practices which are prevalent in the Air Force Facilities Contracting field. These, of course, are of lesser importance than those previously covered in detail, however, in total they are of prime importance in any consideration of the Facilities Contract.

Retention of Records

Under the provisions of the standard Facilities Contract, it is necessary for the contractor to maintain all records for a period of six (6) years after final completion of the contract. In addition, records generated by the Air Force personnel, as well as those collected in the administration of their respective duties, must also be retained for the same period. The contractor is required to store his records, at his own expense, in a location where they are readily accessible. The Air Force, on the other hand, maintains complete record storage depots, strategically located, where all the records generated on a particular contract are sent. These records are cataloged in detail before being sent and are then cataloged in conjunction with records sent on other contracts when they arrive at the storage depot. In order to retain any semblance of order, it is necessary to expend a great deal of time in first, sifting out the essential records to be sent, and second, maintaining an accurate catalog listing so that any particular record may be located at will. Time resolves
itself ultimately in expense and therefore contributes to the overall cost of doing business under a Facilities Contract. In addition, a tremendous overhead has to be maintained in keeping the record safe and dry, providing for personnel to handle the records, handling of material itself, heat; light, etc.

The primary purpose for the retention of records is, of course, due to the post audit feature of the General Accounting Office and Congressional Committees. As previously pointed out in Chapter V, this practice in itself is undesirable and, if it could be eliminated, it would not only provide the direct benefits cost wise, but would also eliminate the need for prolonged retention of records. Thus the tremendously expensive organization which has been built up to handle this problem could be at least drastically reduced bringing with it the resulting economies.

The Advisory Council on Federal Reports, a business group, is now working with the U. S. Bureau of the Budget in urging government agencies to specify, with each new regulation requiring records, just how long the data must be retained. It recommends a six (6) year maximum.

Private Industry Practice

Private enterprise also makes provision for the retention of records but once its papers have been audited and approved they are destroyed, except for those documents which pertain directly to corporation or income taxes. In these instances, it has become the practice to microfilm the records and destroy the originals, thus drastically reducing storage space required.

The Wyman-Gordon Company in procurement of capital items, retains all records which pertain to the actual payment for these items for a period of ten (10) years. Other papers such as correspondence, delivery statements, expediting notes, etc. are destroyed shortly after the item is secured.
This practice is essentially the same as that utilized by the Bay State Abrasive Company in Westboro.

Much work is being done in this area by the National Records Management Council, the Controllership Foundation and the American Society of Corporate Secretaries who are attempting to establish guides to saving records. Once these guides have been established it is assured that standardization will prevail throughout private industry.

Use of Security Classification

Another phase of the Facilities Contract which should be subjected to close scrutiny is the rather effusive use of security classification for work being performed under the contract. Basically, the security classification program was initiated in order to protect that information which was vital to the security of the country and to keep it from falling into hostile hands where it could be used to the disadvantage of the United States.

In order to make such a system work, it is necessary for all personnel who are connected with a particular classified project, to be "cleared" by minute investigation into their past lives, their beliefs, and their actions. A great deal of time and effort is spent in the investigation to determine whether a person is suitable to handle classified material and any limitation on the unnecessary use of classification would eliminate these costs.

Although much time is spent in determining whether one is suitable to handle such material, very little time or effort is spent in deciding exactly what should or should not be classified. In actual practice there is the tendency to overclassify material on the presumption that it is better to be safe than sorry. This, of course, is true, however, judicious use of the security classification would drastically reduce not only the costs relating directly to
investigations of personnel, but also those connected with control of the classified material such as segregation of material, special safes or filing cabinets, guards, etc.

No specific comment can be made on this particular phase as each individual case must be handled in the light of its own particular requirements, however, it can be generalized that a more forceful, dynamic approach should be taken to this problem with an eye towards economy as well as security.

**Private Industry Practice**

Private concerns are seldom affected by security classification as a result of their own operations and must cope with this problem only when it is inflicted upon them by the government or government contractors and then must follow rigid rules and regulations set forth for its operation. Thus, any revisions to this system would have to be accomplished at the source, that is the point at which the initial classification is made which is the governmental agency involved.

Fortunately this problem is encountered but seldom in the Facilities Contracting field due to the nature of the equipment covered by this type of a contract.

**Relation between Congress and Industry**

The Legislative Branch of the Government as well as Congressional Committees has been previously discussed under Chapter V in relation to their function as Administrative "Watch Dogs" over the Facilities Contract Program. However, their prime function is the initiation of the statute and law governing the administration of all Government procurement. Consequently, their impact on this whole problem is extremely great.

Legislation designed to govern the various procurement programs must be of necessity very broad in view of
the fact that they must cover the entire field. Thus, no one (1) type of contract in particular is usually analyzed to determine what is best for its particular needs. On the contrary, legislation is directed towards the satisfaction of the overall general need.

It is suggested that closer cooperation be maintained between the Legislative Branch of the Government and the various organizations set up by industry for reviewing the overall procurement policies. True, the utilization of this method might provide the possibility for undue bias in a decision. However, private industry engaged in business for the prime purpose of making a profit are, we feel, in a better position to indicate those procedures and practices which are the most economical. As previously stated in the introduction of this study, there are several business organizations which are formed for the sole purpose of reviewing proposed government legislation with a view towards practicality and economy. If these suggestions, after due consideration, are conscientiously followed, it is certain that the administrative costs of procurement under a Facilities Contract or any other type of Government procurement would be greatly decreased.
CHAPTER VII

SPECIAL FACILITIES CONTRACT AF 33-600-36321

The above referenced Facilities Contract, a copy of which is included in Appendix A of this study, was entered into between the Wyman-Gordon Company, North Grafton, Massachusetts, and the United States of America (Department of the Air Force) on 8 November 1957 for the purpose of supplying a numerical controlled profile milling machine to be used in the development and production methods therewith.

A separate and entirely distinct contract had already been entered into by the two parties which provided for the exact development work to be performed, the reports required, the frequency of reporting and other terms and conditions governing the use to which the machine would be put by the contractor, Wyman-Gordon Company.

Purpose

It was the purpose, then, of this contract merely to provide contractual coverage for the acquisition and retention of the machine in the plant of the contractor, Wyman-Gordon Company. This is not unique for this particular Facilities Contract, but is in keeping with the scope and definition of a Facilities Contract. Normally, as previously pointed out, the Facilities Contract provides facilities or equipment to accomplish a particular job, but does not spell out in detail the job to be completed except for that period during which acquisition is taking place. The subsequent period is covered either by a Facilities Lease Contract, Operating Contract, or Research and Development Contract.

In a discussion of this particular Facilities Contract, it is needless to go into detail on the work to be performed. However, it does consist of an evaluation
of the Numerical Control Profile Milling Machine to see if it is feasible for production of dies utilized in the forging industry.

**Form**

The form of the Facilities Contract is standard as utilized by the Air Force. The cover sheet indicates the Contract Number, the Parties to the Contract Proposal, Issuing Number, Office of USAF Administration, the Date of Agreement. Page 2 is a Table of Contents listing by page numbers the location of various administrative clauses.

Page 3 embodies the Preamble to the Contract. This Preamble merely restates in more detailed form the purpose of the Facilities Contract. Pages 1 through 10 contain the General Provisions governing the administration of the contract. These are standard terms and conditions utilized for all Facilities Contracts and are, therefore, preprinted by Headquarters, AMC. In this manner, when a Facilities Contract is to be written, the issuing office need only attach the Cover Sheet, Preamble, and Final Schedule to these standard conditions and a Facilities Contract is born. Thus a great deal of administrative time and effort is saved on the part of the issuing officer as he does not have to look up, and rewrite in detail the General Provisions which apply to all contracts. Where a deletion for this particular contract must be made in these standard terms and conditions, as indicated on Page 2 and 3 of this contract, the particular paragraph in question is merely x'd out by typewriter. A reference note is then placed at the end of the deleted paragraph to indicate where the changes can be found.

In this particular contract the final clause, which is Number 23, is entitled "Alterations in Contract".
The changes are typed on an additional piece of paper which is attached as the final page of the General Provisions. In this manner changes can be rapidly made in the standard terms and conditions to adapt them to a particular case. In the special Facilities Contract No. AF 33-600-36321, two (2) changes were made. One (1) specifically limited the use of this equipment only in the performance of the special Research and Development Contract. The standard terms and conditions usually provided for utilization of equipment for "any legal purpose".

The second change merely incorporated the latest provision for Property Control Records which was issued through the Armed Services Procurement Regulations.

Provisions

As can be noted, the provisions of the contract deal with all phases relating to the utilization of Government owned equipment in a privately or Government owned installation. In addition, certain provisions are included which are mandatory by law. These provisions pertain to such things as labor, certain procedures to be followed in the securing of the contract, control of the property while in the hands of the contractor, liability for the property, and provisions governing the conduct of both parties during the administration of the contract. These clauses will be reviewed in detail further on in this study. The second last page of the contract includes a schedule which lists in detail the item of equipment to be furnished. The last page of the contract is a signature page which includes signatures of both parties to the contract as well as a certificate executed by the clerk of the contractor indicating that the person signing for the contractor was an authorized executive of the company.

Negotiation

Negotiation of this contract was rather simple
in relation to normal procedure. In this particular instance the Air Force had acquired from Machine Tool builders a number of numerical control milling machines. These machines were untried and untested in production as they were exceedingly expensive but could insure no high degree of performance in operation. Therefore, private industry was reluctant to utilize the machines in their production processes at the present acquisition cost. In order to insure the United States with the latest development in machine tools and to further development thereon, the Air Force had agreed to purchase a number of these units.

Once these were acquired, it then became necessary to put the equipment to use in order to give it a fair test. Although the ultimate operator of the equipment would acquire a certain benefit from the use of the equipment, if it performed satisfactorily, he was still gambling that it would not operate commensurate with expectations and that extensive maintenance costs would be incurred. There was, however, a fourteen (14) month limit placed on the Use Contract which would govern the Facilities Contract as well. At the end of Fourteen (14) months, a re-evaluation could be made and adjustment accomplished depending upon the operational results of the machine tool.

In view of the fact that the Air Force itself was soliciting the contract with Wyman-Gordon Company and both parties were fully aware of the circumstances involved, negotiation was at a minimum. The only matters which caused concern were details in the standard terms and conditions which had to be revised to fit the particular situation. Once this was accomplished the execution of the contract was routine.

At this point it should be stated that this is not generally true of special Facilities Contracts. When the soliciter of the contract is the contractor himself
there is much more time and paper work involved. The organizational channels pointed out in Chapter II of this report must be adhered to rigidly and all information must be submitted in great detail with positive justification for the request. Even after this has been accomplished there is no assurance that the Air Force will see fit to enter into a particular contract because of the status of Appropriated Funds at the particular moment.

Approach to be Used for Discussion

This therefore is the background of the Special Facilities Contract which is to be discussed in detail in this study. The approach to be used will be to discuss in detail the general provisions of the contract, clause by clause, to indicate how each affects ultimately the total cost of administering the Facilities Contract. Suggestions as to possible revisions will also be made as these points are brought forth in the discussions. The major clauses will be covered as separate chapters whereas the minor ones will be grouped together for discussion as one.

As no one contract can convey a complete picture of all facets of a particular problem, an attempt will be made to expand the information which is given in this particular contract, to others which may differ slightly in some respects. Thus by discussing various alternate situations, it is felt that a more comprehensive and complete picture of the Facilities Contract and its operation can be presented. To limit discussions to only one isolated case, exclusively, would detract measurably from the educational value of the case study method.

Of necessity, reference will be made to information presented in Chapters I through VII of this report and premises developed therefrom. In this manner, the case study will serve as a tying together of ideas which
are formulated on the administration of a Facilities Contract.
CHAPTER VIII

CLAUSE 3 - FACTUAL APPENDICES

Provisions of Clause

This clause provides that a complete listing of all facilities acquired under the facilities contract be submitted by the contractor to the Air Force within three months after the date the contract became effective, and at three month intervals thereafter during the life of the contract. At each three month interval the contractor is to submit a list of facilities provided thereunder for the previous three months only or those which have not previously been listed, together with a list of any necessary changes or deletions of items on previous lists. No listings are required for any period in which there have been no additions to or changes or deletions of previous listings.

Actual Requirements in Practice

The listings are to be broken down into two categories; "Contractor Acquired Facilities" and "Government Furnished Property". "Contractor Acquired Facilities" are those which have been purchased by the contractor for which he has been reimbursed by the Air Force from funds provided in the Facilities Contract for that purpose. Acquisition of these facilities must be in accordance with the terms of the contract and they must have had prior Air Force approval indicating their appropriateness to the contract. "Government Furnished Property" is that equipment which has been supplied directly by the Air Force to the contractor, at no cost to the latter. Such items also require prior Air Force approval as to appropriateness to the contract and are supplied from the Industrial Reserve System previously discussed in Chapter I of this study.
Under Contract No. AF 33-600-36321 being discussed directly in this report, the preparation and submission of the "Factual Appendix A", as these listings are called, is a comparatively simple task as there is only one item of equipment involved, namely a numerical controlled tracer milling machine. Under Facilities Contracts which provide for a large number of items, particularly when they are partially Government Furnished Property and partially Contractor Acquired Equipment, the task of preparing such listings becomes a full time job for some member of the contractor's organization.

The detailed requirements for the form and type of information to be included in a Factual Appendix are as follows:*

Items are to be segregated by classification previously referred to, i.e. Contractor Acquired Equipment or Government Furnished Property. Each category is then further broken down into the following categories:

Land
Land Improvements
Buildings
Building Installations (Not Mechanical)
Leasehold Improvements
Off-Leasehold Improvements
Machinery
Equipment
Building Installations (Mechanical)
Laboratory and Testing Equipment
Office Furniture and Fixtures
Cafeteria Furniture and Fixtures
First Aid Furniture and Fixtures
Portable Tools
Material Handling and Automotive Equipment

* 16, p. 1399.6
Each item is then listed under the particular category in which it falls with the following information: Item No., Quantity, Description, Acquisition Cost, Manufacture Serial No., Reference No., USAF Blue Tag No., Air Force Diamond Tag No., AMC Approval Authority and Date, Purchase Order No., and Plant Order No.

The total acquisition cost of all items within a particular category is noted and a dollar summary sheet prepared indicating the total amount spent within each category as well as the overall total amount.

As this report is prepared quarterly, it is normal for the contractor to prepare a standard form which is preprinted in a large number of copies. In order to complete a report, it is only necessary then to fill in the required information from receiving reports issued during the prior three month period.

It should be here noted that the reason a report of this type is required by the Air Force is that the Factual Appendix A acts as an inventory report for all equipment procured by the Air Force during each calendar three month period. When the Factual Appendix A has been received at Headquarters, AMC, it can be combined with similar reports received from all of the other Air Force contractors and this combined report then is a documented listing of all Air Force equipment procured during this period. This ready reference is essential if administrative Air Force Officials are to know the status of acquisitions at any particular moment. As the files are accumulated quarterly, a running total is kept which then serves as an inventory for all Air Force owned property.

Present Tendencies on this Subject

However, for a number of reasons which will be discussed later in this chapter, the Factual Appendix A has not been able to fulfill the requirements for which it
was established and in addition has been proven cumbersome and expensive to prepare and administer. Consequently, the tendency has been, in Facility Contracts issued during the last year, to eliminate Clause 3 which provides for the preparation of the Factual Appendix A and to substitute in its place the submission of AFPI Form 81 "Status of Facilities Contract". For ready reference, a copy of this form is included in this report and designated as Exhibit 3.

As can be noted from this exhibit, no provision has been made for itemizing individual items as they are procured as was the case with the Factual Appendix A. The report is, however, prepared and transmitted by the contractor to the Air Force, quarterly and is intended to indicate all acquisitions of Air Force owned property and equipment by a Facilities Contractor. As in the case of the Factual Appendix A, these reports act as an inventory report for a particular three month period, and when taken in total indicate the complete inventory of Air Force owned equipment.

AFPI Form 81 is essentially a dollar inventory control rather than an item inventory control as was Factual Appendix A. However, the dollars for items procured are broken down into essentially the same categories as listed for the Factual Appendix A. Two additional categories have been added; those of Indirect Costs and Storage, and Preparation for Shipment Costs.

In addition, further information is required on the status of the Facilities Contract which was not required under Factual Appendix A. This information is required to present a complete overall picture of the status of any particular Facilities Contract on this sheet of paper.

Production information to be furnished by the contractor includes product, information as to schedule or
### I. INVENTORY INFORMATION

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<th>VALUE OF INDUSTRIAL RESERVE EQUIPMENT</th>
<th>ALL OTHER AIR FORCE INDUSTRIAL EQUIPMENT</th>
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### II. PRODUCTION INFORMATION

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### IV. DELIVERY INFORMATION

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### V. CONTRACTOR APPROVAL

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### VI. AIR FORCE APPROVALS

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### VII. REMARKS

*NOTE: All dollar figures are in thousands.*
completion of the Facilities Contract, present production rate, highest monthly production rate, and shift capacity per month both before and after expansion under the Facilities Contract. This information is utilized by the Air Force in determining whether the Facilities furnished under the contract are being used to their fullest extent and whether the Facilities Contract has proven to be beneficial to the Air Force.

Fiscal information consists of funds allocated on the contract, forecast of funds to be utilized for expenditure by the Air Force, and anticipated surplus over allocated funds. This information is of great assistance to Air Force personnel in budget planning and in determining whether contract progress, financially, is in accordance with the original forecast of funds required. This is particularly important when the Facilities Contract is of a cost reimbursement nature.

In addition, certain information is required on delivery schedules of the contract. This information, although not pertaining directly to the Facilities Contract, serves as a measuring stick in determining the success or failure of the Facilities Contract and also forces the contractor to preplan and schedule his production to insure fullest utilization of the equipment being supplied under a Facilities Contract.

It is needless to say that, once having been prepared properly, the AFPI Form 81 is a highly useful and informative report from the standpoint of both the contractor and the Air Force. It provides a variety of information which, if used properly, can make the administration of the Facilities Contract easy, as well as serve as a ready means of combining information from a large number of separate contracts.

Although this form is being utilized on new
Facilities Contracts now being issued, there are still a number of Facilities Contracts issued prior to this date which still require the Factual Appendix A; Contract AF 33-600-36321 is one of them. Steps are being taken by the Air Force to make changes in all present contracts but progress has been extremely slow. It is expected that in the near future the contract in question will be amended in accordance with this regulation.

Possible Economy Revisions

From previous discussions in this chapter, it can be seen that a great forward step has been taken by the Air Force in minimizing the paper work and costs involved in determining the status of Facilities Contracts. The Factual Appendix A was expensive to prepare in both time and man hours as each individual item acquired had to be listed in great detail. These costs were borne directly by the Air Force and contributed to the overall costs of the item procured under a Facilities Contract. If the final Facilities Contract was of a cost reimbursement nature then all the costs for preparation for this report were reimbursable to the contract. If the Facilities Contract was of a "fixed price" nature then these costs were added to the Fixed Price submitted by the contractor and were therefore directly borne by the Air Force.

The substitution of AFPI Form 81 has definitely been a step in the right direction. For purposes of overall inventory information, a dollar control is more than sufficient. It is to be understood that backup detail item information is available in the form of Property Record Cards which are retained by the contractor and supervised by the Air Force Property Administrator. Thus, the Factual Appendix A was merely a restatement of information already prepared and in the file of the Air Force.
It does not appear that this particular phase of the Facilities Contract can be simplified to any greater extent than has already been accomplished by the Air Force itself.
CHAPTER IX

CLAUSE 4 – REPORTS

Provisions of Clause

Clause 4 of Contract AF 33-600-36321 provides that the contractor, Wyman-Gordon Company, shall, insofar as it is able, furnish the Air Force such reports, estimates, and other information regarding the subject matter of this contract as the contracting officer finds necessary and reasonable. This includes such records and data with respect to the facilities provided, hereunder, as may be required by the Contracting Officer not only in connection with the contract itself, but also for overall Industrial Planning or other purposes. Coverage, therefore, is all inclusive and any information at all can be requested for any reason what-so-ever as long as the Contracting Officer deems that it is necessary and reasonable.

Actual Requirements in Practice

Although the power to request and receive a great many varied reports has been written into the contract, exercise of such powers on the part of the Contracting Officer has been judiciously taken to the extent he has been able. In many instances, the Contracting Officer is merely a recipient of a request for information from higher headquarters and must pass this request on to the contractor whether it is his belief or not that said information is necessary and reasonable.

Under the above referenced contract, the following reports constitute the ones which are required on a periodic basis notwithstanding:

1. **AMC Form 37 – "Report of Utilization of Heavy Presses"**
   (Prepared as of the end of each month and submitted to Commander, AMC to arrive no later than the 12th day of the succeeding month)
2. AMC Form 87 - "Status of Funds on Special Facilities Contract" (Information similar to that included in Sections I, II, and III on AFPI Form 81 previously discussed. Form will be replaced when AFPI Form 81 is incorporated in basic contract)

3. AMC Form 337 - "Industrial Construction Initial Progress Report" (Submitted prior to Initiation of any construction)

4. AMC Form 337A - "Industrial Construction Monthly Progress Report" (Prepared as of last day of each month for each project under construction. Submitted not later than 15th day of following month)

5. AMC Form 337B - "Industrial Construction Final Progress Report" (Prepared upon completion of a project)

6. DD Form 702 - "Order for Purchase of Supplies or Services" (Prepared as of end of each month indicating Funds Committed, Funds Obligated, and Funds to be Obligated by Fiscal Year)

7. "Annual Report of USAF Real Property and Equipment" (Information submitted to Air Force Audit Branch on Yearly Purchases, transfers in, retirements, transfers out, and adjustments)

8. AMC Form 51 - "Industrial Equipment Inventory and Visual Inspection Report" (Prepared on each individual item of equipment whose acquisition cost exceeds $500 or whose life is greater than 4 years, immediately upon receipt of item)

9. AMC Form 51A - "Industrial Equipment Inventory Change Sheet" (Prepared to alter any information
10. **DD Form 543** - "Termination Inventory - Schedule B"
   (Prepared and transmitted whenever a piece of Air Force owned property is declared surplus to the needs of the contractor)

11. **AMC Form 244** - "USAF Industrial Facilities Inventory Report" (Prepared annually by Air Force personnel from information supplied)

The above listing of report forms, although not complete in any sense of the word, does cover the major ones which are required periodically and in accordance with a set schedule.

Many other reports are requested, but are usually of a spontaneous nature and in no set form. Most of these are concerned with financial and physical progress of the Facilities Contract and serve as a measure of the contractors ability to complete the work in accordance with a pre-determined schedule.

It is felt unimportant at this stage of discussion to include in this study a copy of each of the reports referred to as the majority of information included therein is irrelevant to the actual administration of the Facilities Contract. They are detailed in order to provide an idea of the magnitude and extent of information which is usually required under the terms of Clause 4 in a Facilities Contract and to serve as a basis for further discussion.

**Recommendations**

As can be readily seen, the Reports Clause of the Facilities Contract provides for the Air Force a blanket authority to request, at will, any information from the contractor it deems necessary and reasonable. This is undoubtedly as it should be, for the Air Force is the
organization which is supplying the funds for the project and as such should have at its disposal every means of protecting its interests. On the other hand, it is extremely important that this right, which is accorded the Air Force in view of its sovereign position, not be abused. Every report or request for information ultimately resolves itself into cost, which cost is, of course, borne by the government and becomes ultimately a portion of the final purchase price for the facilities.

The clause itself should be clarified and detailed. If possible, the description and details of each report required should be spelled out in order to give the contractor an idea of what to expect. If this information is known, the contractor can arrange his methods employed in the recording of contract data in such a manner as to rapidly yield the information desired with a minimum of time and effort. Under a fixed price Facilities Contract, the contractor could then estimate his ultimate costs more closely, thereby eliminating the necessity of including a contingency factor.

Of course it would be extremely difficult for Air Force administrative personnel to plan exactly the information required, but if some intensive study is given to the uses to which this data will ultimately be put, it is a certainty that much of this problem can be resolved. In addition, the Air Force would be able to receive these reports in a much shorter time, due to the advanced organization of the contractor's records, making the information more current and, therefore, of much greater value in future planning.

Again it is unfair to request a Facilities Contractor to supply information which is not related directly to the administration of his particular contract but which is to be used ultimately in "Industrial Planning"
or for some such nebulous reason. It is felt that if the report requirements are spelled out in detail beforehand a great deal of this paper work can be eliminated as it will be brought to light during contract negotiations and therefore be opened up to discussion. In many cases, the Air Force Contracting Officers or Contract Administrators have no idea of what information requests will be made of the contractor at the time of the original negotiation and, therefore, cannot properly evaluate it's impact on the contract price.

The determination as to what information is necessary and reasonable is left exclusively to the discretion of the Contracting Officer. As previously pointed out, in many cases requests for information are passed down to him from higher levels. As the Contracting Officer has no backup information on which to base a decision as to whether such requests are necessary or reasonable, the usual result is that the request is passed to the contractor without question. In these particular cases, it is extremely important that sufficient information be supplied both to the contractor and the contracting officer as to the ultimate use the information will be put to. If this is known, much confusion and unintentional misinformation would be avoided for contract terminology, although becoming more defined, still differs between individuals and through no fault of either party, information may be submitted in an improper form causing distortion of the ultimate result based upon the data.

Contract AF 33-600-36321 which is under discussion is relatively simple to handle in this respect as only one item of equipment is involved, and this is to be an item of government furnished property. Consequently, no funds are authorized under the contract for any reason whatsoever. This eliminates any requests which might be forthcoming based
upon status of funds and radically reduces the work involved in preparation of reports based upon the acquisition of equipment. Needless to say, by far the majority of contracts are much more complex in this respect making the "Reports" clause of major importance both in determination of personnel required to administer the contract and final administrative costs.

Wyman-Gordon Company, in fulfilling the terms and conditions of its more complex Facilities Contract, assigned one individual, full time, to provide the Air Force with the information it requested. This individual was designated as the "Air Force Statistical Coordinator" and devoted his entire efforts not only to completion of report forms, but to the organization and simplification of data keeping in such a manner that it would be able to yield the same information in a great many different ways. The principle method used was to enter data in as refined form as possible so that it could be combined in any number of ways. Thus, when a particular request was received from the Air Force, it need only be determined exactly what was desired, then the data could be arranged to fit the particular need.

The contract itself provides, under later clauses, that adequate records, both propertywise and accountingwise, be kept by the contractor and it is felt by Air Force personnel that these records can, therefore, be used as a basis for completion of the requested reports. This unfortunately is not the case as the records are established in accordance with a strict set pattern and information usually asked for in the reports does not correspond in pattern to the records. Of course, with a great deal of work the records could be arranged to yield the proper result, but because of the great amount of work involved and the fact that excessive shuffling of records is bad from the standpoint of control, this is not feasible.
The individual who is designated as the one who is responsible for completion of Air Force reports must be of high caliber as completion of these reports constitutes a direct representation by the contractor that such information is complete, accurate, and in accordance with established records. He must, therefore, have a good knowledge of accounting, engineering, and business principles in order to accurately appraise a situation and determine the exact information desired by the Air Force. Because of the extensive experience and training required for this position, the position is extremely difficult to fill adequately and then only at a premium cost in wages. Usually and assistant is also required, and under a Facilities Contract which extends for one, two, or three years the cost of such personnel becomes a significant part of the overall contract cost. Any efforts then made in this direction can make a significant reduction in purchase price of the facilities to be secured.

Unfortunately, the present trend in relation to reports is toward more and more rather than less. This, of course, is due to the increased consciousness of the Air Force and private industry as well of the importance of having adequate figures on which to base a decision. Without question, the trend is good because without sufficient figures an intelligent decision cannot be made. However, particularly in view of this present trend, it is important that considerable thought be given to the exact information necessary to fulfill the particular need. Record keeping means increased administrative costs and this expenditure can only be justified by the fact that sufficient savings will be realized because of the availability of the figures to offset the cost of obtaining the figures.

With this in mind, it is felt that a complete review of this situation is necessary in relation to the Air
Force Facilities Contract. Reports required should be spelled out beforehand in the "Reports" clause and these should be kept at an absolute minimum required for a specific purpose. Undoubtedly, a number of these can be combined in such a manner as to convey the required information to a number of different parties at a minimum of preparation costs. In addition, the printing and paper costs of forms could be greatly decreased insuring that more of the dollars expended for an item go directly into it's production rather than into overhead costs. In addition a number of specialized contractor personnel could be released for other, more productive work under the Facilities Contract.
CHAPTER X

CLAUSE 5 – USE AND CHARGES

Although not specifically a function of the pure Facilities Contract, some designation as to use and charges for the equipment supplied, thereunder, is usually included in the contract terms. The alternate method is to have a separate operating contract in the form of a Facilities Lease Contract or Research and Development Contract which spells out specifically the terms and conditions of use, charges therfor, etc. In this particular instance, this designation has been placed in both the Facilities Contract covering the acquisition of the machine tool and the Research and Development contract covering its use.

It must be mentioned, however, that in small Facilities Contracts the additional covering contract is eliminated and all terms and conditions covering the item or items concerned is included in one document. For this reason, the "Use and Charges" clause is included as a standard General Provision.

Provisions of Clause

This clause provides that the equipment covered by this contract may be used without charge under the following circumstances, subject to the approval of the Contracting Officer:

1. On any Air Force Prime contract which expressly authorizes no charge use
2. On any subcontract under an Air Force prime contract when both the prime contract and subcontract expressly authorize such no charge use
3. On any government contract which doesn't interfere with the foregoing as long as it is -
a. A prime contract which expressly authorizes such no charge use.
b. A subcontract under a prime contract when both expressly authorize such no charge use.

4. On any work in connection with the Research and Development contract for which the equipment under the Facilities Contract was supplied.

The latter provision was added by change under Item 1, Clause 25 of Contract AF 33-600-36321 indicating that such provision is not standard for a Facilities Contract in general.

In addition, this change provides that the machine will be used "only" for this purpose. Therefore, in view of the fact that contradictory provisions are included in the contract, that of authorizing only use on the Research and Development contract, but also use on certain contracts providing for no charge use of equipment, determination was made by the Contracting Officer that the more restrictive provision would apply. However, upon application to the Contracting Officer with sufficient justification, the item could be used on the other contracts specifically referenced.

The probable reason for the contradictory provisions was in all likelihood a haste in preparation on the part of the buyer at Headquarters, AMC. In attempting to adapt the standard General Conditions to this specific instance, certain terms were left remaining which, when read in the light of the special terms, were contradictory in nature.

This, of course, is one feature of trying to adapt General Conditions to specific cases which must be scrutinized extremely closely. Although not of great significance in this particular case, it may lead to considerable dispute
if such contradiction concerns the major contract clauses or materially affects reimbursement of funds to the contractor. It is also important that the original intent of the clause be established, preferably in writing, in case a dispute does arise so that the Contracting Officer may make an equitable interpretation of the contract terms. In this particular contract, it was clearly understood beforehand that the equipment was being supplied only for one reason; to test the feasibility of utilizing a numerical controlled milling machine on the production of die blocks used in the forging industry, consequently, no dispute could arise.

The portion of the "Use and Charges" clause pertaining specifically to charges has been x'd out by typewriter indicating that the contract was let on a no charge basis. In spite of the fact that there is no charge for the use of the equipment, the contract is a legal and equitable one in view of the fact that consideration to the Air Force consists of periodic reports to be submitted under the terms of the Research and Development contract. In addition, the contractor, Wyman-Gordon Company must expend funds for installation and erection, preparation of test die blocks, and submission of reports. Thus, although not specifically stated, there is a cost attributable to the contract for the use of the equipment.

As can be noted from the section which has been eliminated, the standard rate for the use of Air Force owned facilities is as follows:

- 5% per annum for land and land improvements
- 8% per annum for building and building installations
- 12% per annum for machinery and equipment
- 25% per annum for portable tools and automotive equipment

These percentages indicate that the Air Force
considers the normal life of these items to be; 20 years for land, 12½ years for buildings, 8½ years for machinery and equipment, and 4 years for portable tools and automotive equipment.

If the plant into which the equipment is to be supplied is completely Government owned, it is usual for the Air Force to charge a flat negotiated percentage on all sales from that particular plant. This markedly simplifies the calculations on the rental use charge as it is not necessary to detail the acquisition of each piece of equipment and then apply the appropriate percentage noted. From final, year end financial reports, the flat negotiated percentage figure is applied to the total sales figure.

However, the latter method is impractical where there is a mixture of contractor owned and Air Force owned equipment as it would be impossible to distinguish what portion of sales was performed by contractor owned equipment and what portion was performed by Air Force owned equipment. Under these circumstances, it is therefore necessary to use a rental based upon the acquisition cost of the Air Force owned equipment.

Where charges are made based upon the acquisition cost of equipment, it is extremely important that complete, accurate, and readily accessible Property Records be maintained. Although this is important under any Air Force Facilities Contract, it takes on added significance in this case and it would, in fact, be necessary to establish a staff of personnel specifically for establishing these records and maintaining them up to date. These charges, although not directly reimbursable under the Facilities Contract, would have to be absorbed by the product being manufactured in the plant. Thus if production is primarily for the military, the Government would bear the brunt of these costs which would increase their purchase price.
Purpose of Provision

The purpose of the "Use and Charges" clause is to state in definite terms the negotiated agreement reached by both the contractor and the Air Force for the terms and conditions under which the equipment is to be used. However, it has been the practice of the Air Force to apply standard conditions for this particular purpose, making it identical among various contractors. Although admittedly this is equitable, it must be realized that there are differences in each contract which should be taken into consideration, particularly on the amount of charges to be paid. The contractor who is utilizing the equipment 100% on Government work should be allowed to utilize the equipment on a no charge basis, whereas the contractor utilizing the equipment 100% on commercial work should pay the maximum fee. This reason is premised on the basis that the contractor performing 100% military work will add to the burden cost to be applied to the selling price, the rental charge due the Air Force. On top of this, he will add a standard percentage of profit which he will figure into the selling price of the item and be reimbursed for complete use charges as well as a percentage of profit on them. If these costs are borne by the military, it would be to their advantage to eliminate them at the original point and thereby eliminate the profit factor.

As the purpose of the Facilities Contract is to supply machinery, equipment, and facilities to a contractor to perform that work which private industry is unable or unwilling to perform, the least expensive method to the Government should be utilized. A detailed investigation should be performed on each particular contract to determine which is the least expensive.

The "Use and Charges" clause, therefore, should be eliminated from the General Conditions utilized by the Air Force in the preparation of the Facilities Contracts. In
this way it would then be necessary for the issuing officer or buyer to determine, on his own, the most economical method to be utilized. By allowing this to remain in the standard "Boiler Plate", the analysis required to select the proper clause might be overlooked and the standard provisions provided merely because it is more expedient to do so. For this reason the Air Force may be in a position of paying an unnecessary premium for securing the information or supplies it requires.

Part C of this clause does provide that in any contracts performed by the contractor using facilities provided, hereunder, on a no charge basis, he will eliminate from the price and for the purpose of computing for fees, all charges attributable to the machine itself. This specific provision is utilized only when the contract is on a no charge basis.

Standard Commercial Practice

The percentages utilized as charges for depreciation appear to be reasonable in relation to those utilized in standard commercial practice. Wyman-Gordon Company utilizes essentially the same years of life for the items referenced in this clause, however, each item is handled as a separate case based upon the particular circumstances involved. It is felt that no blanket provision can be made to cover all instances. The provision providing for a flat percentage charge based upon sales is, by far, the better arrangement if it can be appropriately applied to the particular situation.

It does not appear that there is much deviation in this clause from standard commercial practice other than the minor points referenced above. Considerable investigation on this phase has been made by both the Air Force and Congress itself and the major point of concern appears to be equity between contractors rather than the total dollars realized.
from rental charges. If the arrangements by the relative contractors are equitable or identical, the amount of disputes apt to arise over this clause would be greatly diminished. Consequently, revisions required in this area should be directed to that objective rather than a revision to the detailed terms and conditions of the lease.
CHAPTER XI

CLauses 10, 17, 18, 19, & 22 – PROPERTY CONSIDERATIONS

The above referenced clauses are grouped together because they all pertain to the same objective, that is the control of Air Force property while in the possession of the contractor. They do, however, deal with different aspects of the problem, but should be combined in any discussion to provide one complete, overall picture of the types of controls exercised under the varying circumstances.

Provisions of Clause

Clause 10, although coming first in the contract itself, is actually the instruction pertaining to the last operations to be performed on an item of equipment prior to its disposal because it has become excess to the requirements of the using Government contracts, or is worn out, damaged, or otherwise unserviceable. Specific instructions as to the handling of the item itself under any of the above circumstances is referred to in Paragraph C of Clause 9 entitled "Termination". These instructions merely cover broadly, and in general terms, what operations will be required to be performed by the contractor if an item is to be disposed of. Provision is also made in Clause 10 for the purchase of any unserviceable property, including scrap by the contractor if he so desires.

Clause 17 protects the title of all equipment furnished under the Facilities Contract by stating that title of all equipment so furnished will remain in the Government even though it has been installed in a non-government plant.

Clause 18 restricts the contractor under a Facilities Contract from removing or parting with the possession of any facilities provided, hereunder, in any manner what-so-ever for any reason what-so-ever.
Clause 19 is probably one of the most important of all the contract clauses as it deals specifically with the contractor's liability for Air Force owned property while it is in his possession. Generally, the contractor is always financially liable for any loss or damage which results from;

a. A risk expressly required in the contract to be insured against
b. A risk covered by insurance, but only to the extent of such insurance
c. Willful misconduct or lack of good faith on the part of any of the contractor's directors or officers, or on the part of any of its managers, superintendents, or other equivalent representatives
d. Failure on the part of the contractor or his representatives to maintain and administer, in accordance with sound industrial practices, a program for the maintenance, repair, protection, and preservation of the facilities or to take reasonable steps to comply with any written instructions which the Contracting Officer may prescribe as reasonably necessary.

The contractor is never liable for any losses resulting from the so called "excepted perils". These are usually listed in the contract and include such things as fire, lightning, windstorm, and generally all acts of God. A listing of these can be found on page 7 of subject contract included in the Appendix of this study.

As the Air Force is a self insurer, it is definitely stated that no property damage insurance will be retained by the contractor on Air Force equipment unless it be for the contractor's own benefit and at its own expense. Thus, the contractor is not liable for a loss which is customarily
covered by insurance in normal practice as the Air Force does not allow insurance to be carried at its expense.

General instructions are included in this clause for the steps to be taken in case of a loss of Air Force owned property and the Air Force reserves the right to recover against third parties if appropriate.

Clause 22 provides that the Air Force shall be held harmless from any claims for injury to persons or damage to the property of the contractor or others arising from the contractors possession or use of the facilities provided hereunder, and it shall further not be liable for any damages or loss of profits by reason of nondelivery or of any delay in the delivery of any or all of the facilities to be provided under the contract.

Purpose

The purpose of the above detailed provisions is, of course, to clearly spell out on what basis the contractor is to be responsible or liable for the Air Force equipment supplied under the contract once it has been received and is in use at the contractor's plant. The Air Force has not taken the position that the equipment was supplied to the contractor exclusively for his own benefit and, therefore, should be liable for any damages it incurs while being used for the purpose intended. However, on the other hand, it must be clearly understood that the Air Force will not relieve a contractor from liability which arises because of the contractors neglect, misconduct, misuse, or gross failure to adequately protect the item while it is in his possession. For this reason, procedures are spelled out in detail on exactly what is required or expected of the contractor's representatives and for what reasons the Air Force will stand losses on equipment lost or damaged. Without provisions of this nature in the contract, there would
be no meeting of minds between the parties and situations arising in this area would cause constant dispute and turmoil.

**Actual Requirements in Practice**

Although the first cursory glance would indicate that the provisions included herein are complete, adequate, and fair to all parties concerned, it should be understood that these are not the full requirements of the Air Force in relation to property under a Facilities Contract. In Chapter IV of this study two written procedures were discussed which were to apply to all Air Force contracts whether they were incorporated therein by reference or not. These are the "Armed Services Procurement Regulations" and the "Air Force Procurement Instructions". Both of these publications, one of which is written to supplement the other, have a complete section devoted to the subject of government owned property entitled "Appendix B - Manual for Control of Government Property in Possession of Contractors". This Manual is the governing procedure of Contract AF 33-600-36321 as well as any other Air Force Facilities Contract as "it is mandatory on the part of Air Force personnel."* Thus, because the Air Force personnel must first approve all actions by contractors and they must in turn act in strict conformance with the Manual, the contractor is obliged to conform to it or they will not be reimbursed by virtue of having unapproved procedures.

The Manual itself is divided into a number of sections dealing with all phases of property control. By general heading they are; General provisions-detailing definitions, duties and responsibilities of all parties; Records to be maintained - detailing types and kinds of records, by whom kept, and filing instructions; Miscellaneous Provisions - covering identification of items, contractor's responsibility and liability, and auditing property accounts;

* 16, p. 1381
and Adjustment of Discrepancies Incident to the Shipment of Government Property - Covering procedures to be followed whenever discrepancies occur in connection with a shipment and outlining the responsibilities of the Air Force and the contractor to report, adjust, or settle such discrepancies.

In case that provisions, specifically included in the contract itself, differ from any procedures or regulations in the Manual, the ones in the contract shall prevail. In practice, the difficulty arises in that contract provisions are apt to be written in a general vein, not being too specific on any one subject and generally can be interpreted in such a manner as to allow the requirements of the Manual. Needless to say, Air Force personnel who are administering a contract will tend strongly towards a liberal interpretation to allow the provisions of the Manual to become effective and seldom is any direct contradiction determined between the two, although it might be originally intended that there be. It is, therefore, of utmost importance that both parties to the contract spell out in detail any specific points they have agreed upon which are in conflict with standard terms and conditions.

The "Manual for Control of Government Property in Possession of Contractors" is explicit and exacting on all phases of government property control. In reality, there is little chance for interpretation of the regulations as it is the avowed purpose of this document to enforce some degree of standardization between contracts and it has been so written. Thus the Facilities contractor is rigidly bound in a straightjacket of rules and regulations which are designed to cover all government contracts in general. No consideration has been given to special situations which might arise in relation to one specific contract
nor has any provision been made to effect changes for these instances.

The procedures as written are tedious to perform and expensive to execute as the whole tenor of the document bespeaks the distrust of the Air Force towards the contractor. Property forms, records, and controls are spelled out in great detail and are preprinted for distribution to all contractors. In most instances, the information required is far in excess of that called for or utilized by private industry, hence considerable time and expense is incurred in completion of the forms and records.

Liability on the part of the contractor is firmly fixed and is even more strict than that quoted in the contract. No provision is included for excusing the contractor from any loss or damage, although final determination is left up to the Contracting Officer. Under Contract AF 33-600-36321 it has been determined that the contract provisions shall apply in this instance and that liability will be based only upon those cases specifically mentioned therein.

A complete detail of all of the provisions of the Manual is not necessary for the purposes of this study, however, it is essential that it be understood that such a procedure is in existence which does pertain to all government contracts, including the Facilities Contract.

Possible Economy Revisions

Basically, all of the rules, regulations and procedures included either in the General Conditions of the contract or in the Manual are placed there for one reason; to insure the return of the facilities to the Air Force in as good a condition as they were received, less normal wear and tear. With a view towards the end result only, there are several suggestions which can be made to minimize the paperwork and labor involved in the control
of Air Force property. The most obvious would be to eliminate all interim procedures except the requirement for an accurate record of all Air Force property received. Then control of the items could be left up to the contractor completely while it is in his possession with the understanding that the facilities will be returned to the government, when the contractor is through with them, in as good a condition as received, less normal wear and tear. The burden of proof to the effect that only normal wear and tear has taken place could be on the contractor and if the item is not returned in proper condition, or lost, the contractor would be liable. In this way, burden for control of property would be on the contractor who would be able to exercise that amount necessary to adequately protect its interests but not excessive to the point of costing needless dollars. It is a certainty that this would provide modern, up to date, efficient control and the Air Force would be relieved of the requirement to "watchdog" the contractor throughout the duration of the Facilities Contract. It is entirely possible that contractors would exercise little or no control on some items of equipment but decision to do so would most assuredly be based upon the economics of a particular situation. If stringent controls were more expensive than the acquisition cost of the item, it would be good business practice, and more economical in the long run, to exercise as little control as possible and ultimately reimburse the government for the worth of the item less depreciation.

Another approach to the problem would be to eliminate all detail procedures in relation to control of government property and in its stead, spell out the broad general objectives required by the Air Force. It would then be up to the contractor to devise the most economical method of accomplishing these objectives and he would
undoubtedly be able to include this equipment in his normal control procedures of his own equipment, thus providing additional economies. It is strongly felt that freedom of choice in the matter of property by the contractor is essential if economies are to be realized.

It is understandable that the Air Force is deeply concerned with control of its property as it is, in the long run, owned by the people of the United States through whose tax dollar it has been purchased. However, in attempting to be cautious and prudent, the Air Force has been excessively so, to the point of spending needless money. More liberalization by increasing the ability to make choices to fit a particular situation would be to the best interests of all parties concerned.

With a liberalization of interim property controls, the Air Force could rather drastically cut its number of personnel directly assigned at the Air Procurement District level for checking the contractor on this phase. This personnel, assigned to the Property Section, are the Air Force Property Administrators, discussed in Chapter II. With less workload per Facilities Contract, one man could assume responsibility for a greater number of contracts and still perform an efficient job.
involving funds. His decision is usually based upon detailed reports received from the contractor, the Air Force Property Administrator, and the Air Force Quality Control Representative who each make individual, independent surveys of the specific circumstances surrounding each case.

For ease of administration, all property is coded as to condition when it is to be disposed of by the contractor for any reason. These condition codes are as follows:

N-1 Unused, Excellent 0-1 Used, Excellent
N-2 Unused, Good 0-2 Used, Good
N-3 Unused, Fair 0-3 Used, Fair
N-4 Unused, Poor 0-4 Used, Poor
R-1 Repairs Req., Excellent E-1 Rehabilitated, Excellent
R-2 Repairs Req., Good E-2 Rehabilitated, Good
R-3 Repairs Req., Fair E-3 Rehabilitated, Fair
R-4 Repairs Req., Poor E-4 Rehabilitated, Poor

It is the usual practice of the Air Force to accept, without any question of liability, all items which are returned in O-2 condition or better. As O-2 represents a condition which indicates that the item is still in good running or operating order, it is assumed that it has been subjected to no more than normal wear and tear. By establishing this dividing line, a great deal of administrative paper work is eliminated on those items which are in O-2 or better condition.

The first stumbling block in the above detailed procedure is the establishment of the condition code for a particular item. As can be noted, the condition categories are very broad, and different individuals are very apt to rate an item differently. The difference between good and fair, or fair and poor, or excellent and good is a nebulous one and who is to establish exactly where the dividing line is?
The task of accomplishing this feat falls primarily upon the contractor. Through visual and operational inspection, which is tabulated usually on a special form for this purpose, the contractor's Air Force property inspector assigns a condition code which he feels comes closest to describing the actual condition of the item. The inspection report, as well as the item itself, is then reviewed by the Air Force Quality Control Representative who is charged with the responsibility of inspection for the Air Force. Then by discussion, and in some cases negotiation, a final condition code is arrived at which fairly typifies the actual condition as closely as possible. This joint determination is subject to review further by the Air Force Property Administrator, but said review is usually just a matter of form.

Once the condition has been established, the contracting officer must then make a written determination of liability. As previously stated, if the condition is O-2 or better, the determination of liability will consist merely of a memorandum to the contractor stating that he has been relieved of accountability, responsibility, and liability for the item. If the condition is worse than O-2, the contracting officer will notify the contractor in writing that full liability will be assessed against him unless sufficient justification is transmitted to his office in writing before expiration of a certain time, usually 30 days.

The contractor must then establish reasons why the particular item of equipment is in its present condition. Perhaps the most useful tool at this point is reference to the maintenance records for each facility which must be established in accordance with part 2 of this clause.

At the outset of the Facilities Contract, the contractor must submit complete, detailed procedures on
exactly how he proposes to maintain the equipment supplied to him under the contract to the contracting officer for approval. Such procedures shall include not only a preventative maintenance inspection schedule, but details as to maintenance organization, training programs, selection of personnel, and all other pertinent facts about the maintenance program. Once this written program is approved and maintenance records established, the contractor must follow it diligently unless formal written approval is received to alter it.

If the contractor can establish, on a piece of equipment which has been declared in poorer than 0-2 condition, that the written maintenance procedures have been followed as diligently as possible and that maintenance records have been properly established and maintained as well as the fact that the maintenance records accurately reflect the present condition of the item, he may so state in the written report to the contracting officer and run little risk of being held financially liable for the condition of an item. If, however, he cannot do so through failure to comply with any of the written procedures, it is a certainty that some assessment will be made against him.

Of course, the report submitted by the contractor is subject to review by the Air Force Property Administrator and the Air Force Quality Control Representative who themselves in turn submit a written report to the Contracting Officer either confirming the statements of the contractor or offering rebuttal to it.

Upon these reports the final decision is made by the contracting officer either for or against the contractor. The decision is final and cannot be refuted except under the "Disputes" clause of the contract whereby the contractor must submit an appeal to the Board of Contract Appeals in
Washington, D. C. This is usually an expensive proposition as legal council must be retained, hearings attended, and in general, court proceedings followed. Consequently, only those cases which involve a great deal of funds are usually appealed, making the decision of the Contracting Officer, for all intents and purposes, final.

Clause 20 is also supplemented by the "Armed Services Procurement Regulations" and the "Air Force Procurement Instructions" as well as AMC Manual 69-1 which was written exclusively to cover all phases of handling on Air Force equipment. Thus before any maintenance program is set up, due consideration must be given to the suggestions included in these publications.

On Contract AF 33-600-36321 it was unnecessary to submit such a maintenance program as it had already been submitted and approved under another facilities contract which is still effective. However, if this was the first such contract undertaken by Wyman-Gordon Company, it would have been necessary to follow the exact procedure previously outlined in spite of the fact that only one item was involved.

**Possible Economy Revisions**

When viewed objectively, it appears that the provisions included in this particular clause are fair and reasonable to all parties concerned, adequate to protect the interests of the Air Force, and economically feasible. The provision that items are to be returned to the Air Force in as good condition as received less normal wear and tear or depreciation is certainly definite and fair to all parties. The main problem in this area appears to be the determination as to exactly what constitutes normal wear and tear and on what liability is to be based. However, it is felt that any attempt to clarify these provisions would only lead to further confusion and consequently
increase the number of disputes under the clause. If determinations and inspections are performed by competent, reasonable, and honest personnel, there should be few cases where both parties cannot have a meeting of minds.

The most likely place for possible economies in the "Maintenance" clause is in the requirement for complete written procedures on this phase to be submitted to the Air Force prior to start of work. The clause itself definitely states that "maintenance, repair, protection, and preservation are to be in accordance with sound industrial practice". If this is in reality so, the contractor should be able to utilize the same maintenance procedures on Air Force equipment as he does on his own equipment. Time and money would then be saved in the original preparation of the Maintenance program, for the contractor could merely submit his own written procedures with no revisions. In administration of the program, the Air Force equipment could be then merely added to other plant equipment which is contractor owned and handled in the same manner.

This plan, although providing the possibility of some cost savings, might in the long run cost more depending upon the particular situation. If the contractor utilizes a poorly run, inadequate maintenance program on his own equipment, it would not be to the advantage of the Air Force to accept that particular company's "industrial practice". However, this could be established at the time the maintenance procedures are submitted by the contractor for approval and determination made as to whether to accept the procedures or reject them.

Preventive maintenance is one of the most important considerations on any equipment which is rented or leased to another party and for this reason it is felt that the stringent controls exercised by the Air Force in this matter are justified.
CHAPTER XIII
OTHER PROVISIONS

The main provisions of the Facilities Contract which would lend themselves to possible revisions and subsequent cost economies have been discussed in Chapters VIII through XII. In order to present the complete picture in regard to all provisions, this chapter will be devoted to the remaining clauses which must be included in the Facilities Contract for informational purposes, as clarification of terms, or by legislative requirements. These clauses, although having a decided impact on administration of the Facilities Contract, are definite requirements either from the standpoint of good common sense or fairness to all parties concerned and as such should be retained in order to provide a complete document. The only possible revisions which could be made would have to be initiated by the legislative branch of the government but, as previously discussed, this is dependent as much or more upon public policy considerations than upon strictly economic considerations.

Clause 1 & 2, Prelude

Clauses 1 and 2 cover definitions of terms referenced in the contract as well as a general statement of the Facilities to be furnished. These are of little importance except to specifically spell out who is meant by the terms "Secretary" and "Contracting Officer". The facilities to be furnished are merely referred to as those included in the schedule attached which was discussed in Chapter VII of this report. The most important provision is that the facilities to be provided, hereunder, will be done so with no warranty express or implied on the part of the Air Force as to serviceability or fitness for use. As
the contractor has the right to reject all items for good and sufficient reason, this appears to be fair and reasonable.

**Clauses 6 & 7, Air Force Retention of Rights**

Clauses 6 and 7 specifically require the contractor to pay all taxes and charges arising from the use of facilities and also provides that the Air Force shall at all reasonable times have access to the premises wherein any of the facilities provided hereunder are located. As the facilities are Air Force owned but operated to the financial benefit of the contractor, both provisions are in keeping with reasonableness and common sense.

**Clause 8, Records**

Clause 8 covers the maintaining of adequate records and a system of identification of the facilities provided hereunder as well as providing for periodic inventory of the items while in the possession of the contractor. This clause was x'd out in the General Conditions and a substitution clause included as Item 2, in Clause 25. It is to be noted that the substituted clause reflects the latest revision to the "Armed Services Procurement Regulations" and as such will shortly be incorporated as an integral section of the preprinted General Conditions. As the revised clause is most recent, it was not possible to accomplish this in Contract AF 33-600-36321 so the elimination - substitution method was utilized. This clause specifically states the requirements for property control records which is, however, a repeat of the requirements under "Appendix B - Manual for Control of Government Property in Possession of Contractors" previously discussed in Chapter VI. The only new aspect of the property control situation is the requirement for a physical inventory of all items provided under the Facilities Contract. Until recently this requirement was for an annual inventory of all items and therefore presented a situation which was
expensive to administer while providing little benefit to either party. This latest revision, however, removes the provision for an annual inventory leaving the timing of such inventory as a matter of negotiation between the contractor and the Contracting Officer. Thus by mutual agreement, a reasonable schedule for inventory can be worked out to the satisfaction of all on any particular contract by taking into consideration the special aspects pertaining to a given situation. Large machine tools which are permanently installed need be inventoried but seldom, while small hand tools should be inventoried much more often. This has been taken into consideration and allowed for in the latest revision which shall, henceforth, be incorporated in all Facilities Contracts.

The reference in this clause to "stock-listed" items means, in general, all items having an acquisition cost in excess of $500.00 or a life in excess of 4 years. The listing of these items maintained by the Air Force comprises the active items included in the Industrial Reserve System. Thus the contractor under a Facilities Contract must declare to the Air Force on AMC Form 51, previously referred to in Chapter IX, all items it receives in the above category in order that a complete listing may be retained at Headquarters, AMC.

In view of the latest revision to this clause, it appears that the provisions are fair and reasonable and will allow enough leeway for both the Air Force and the Contractor to arrive at a suitable agreement to provide the most economical method of obtaining the desired result.

Clause 9, Termination

Clause 9 makes provision for termination of the Facilities Contract by either the contractor or the Air Force upon the happening of certain specific instances. In general, the Air Force can terminate for any reason
resulting from lack of need for the end item being produced or default on the part of the contractor. The contractor may terminate for any reason what-so-ever as long as the Air Force is given sixty days prior notice. Paragraph C outlines briefly the steps which must be taken in case of a termination by either party.

As it is essential that a proper termination clause be included in any contract, there appears to be no objection to any of the provisions included therein. The only possible abuse of this clause or needless expense incident to it would be a premature or hasty termination by either party. Certainly, having once been in complete agreement on the scope and objective of a specific contract, it is inconceivable that such a situation would arise; however, it has on occasion. On the other hand, immediate termination, based upon good or sufficient reason, is essential if needless costs are to be avoided.

**Legislative Requirements**

The next group of clauses to be considered are those which specifically incorporate statutes passed by the Legislative Branch of the Government and enacted into law by the President. These deal with a number of subjects, but are beyond the scope of this study as their usefulness and necessity have been discussed in great detail before passage into law. The concensus of opinion of the legislators has been that they are necessary, however this does not mean that they may not be changed at some future time.

Clause 11 makes provision for settlement of disputes between the contractor and the Air Force Contracting Officer.

Clause 12 provides that no convict labor shall be utilized in the performance of the contract.

Clause 13 incorporates the Eight Hour Law of 1912.
providing overtime pay at 1½ times day rate for any time worked in excess of 8 hours in any one day.

Clause 14 states that there will be no discrimination in employment because of race, religion, color, or national origin.

Clause 15 restricts any member of or delegate to Congress or resident commissioner from deriving any benefit from the contract.

Clause 16 restricts the use of a person or selling agency to solicit or secure the contract for a commission, percentage, brokerage, or contingent fee.

Clause 24 restricts the contractor from giving or offering gratuities of any kind to any representative of the Government with a view towards securing the contract or securing favorable treatment with respect to the awarding or amending or the making of any determinations with respect to the performing of such contract.

**Clause 21, Right of Diversion**

The Air Force under the provisions of Clause 21 reserves the right to divert any or all of the facilities furnished to the contractor hereunder, when it is determined to be in the best interests of the Government. As the equipment is in actuality owned by the Air Force, this clause is not unreasonable unless such diversion is accomplished haphazardly and without sufficient reason. In spite of the fact that this could happen, it is felt that any attempt to restrict this clause, in any way, would only make it ineffective.

**Clause 23, Reservation of Rights**

The reservation of Rights provision, Clause 23, can be very important at times. In this clause the Air Force states that their failure to insist in any one or more instances, upon any of the terms, covenants, or conditions of this agreement shall not constitute a waiver
of their rights, thereunder, or in the future performance of the contractor. This clause in itself is not important, except that it does indicate that the Air Force may, under certain circumstances, waive their rights under any one of the provisions of the Facilities Contract. This they have reserved the right to do, and will do, upon sufficient justification from the contractor. Thus the contractor is somewhat relieved from the straightjacket of rules and regulations detailed in this report if he can show just cause for such action. On the other hand, Contracting Officers have been loathe to waive any clauses on their own as they are then subject to criticism, particularly if something goes wrong.

Clause 25, Alterations in Contract

The final clause in the Facilities Contract has been previously discussed in a number of instances. This is Clause 25 entitled "Alterations in Contract". In this clause will be found all terms and conditions which vary from the preprinted, standard "General Conditions". It is through the use of this clause that each Facilities Contract is fit to a particular contractor or situation and, as such, is a necessary integral part of the contract.

As previously pointed out, all clauses listed in this chapter were discussed primarily for rounding out the entire scope of the Facilities Contract. The possibility of administrative cost savings or revisions to the clauses which would allow savings through lower purchase prices are slight indeed as the clauses are intended merely to spell out certain requirements common to all contracts, particularly those issued by governmental agencies. However, it is felt that at least some reference should be made to them in any discussion intended to cover the Facilities Contract and such procedure is therefore justified.
CONCLUSIONS

This study has been devoted to a complete scrutiny of the Air Force Facilities Contract in an attempt to establish possible economies both within the administration of the contracts and in the contract terms which would allow the Air Force to procure its supplies, equipment, and research for lower purchase prices.

Perhaps the most important byproduct of this investigation has been to familiarize the reader with the Air Force Facilities Contract, what it is, how it operates, and what it is trying to accomplish. It is important that these facts be known as the Facilities Contract has a great impact upon our general economy as well as industry in particular. Any instrument utilized to expend as much of the taxpayers funds as this contract does, should be fully understood by all members of society, not only with a view towards finding methods to decrease its administration costs, but also to insure that the interests of the general public are adequately protected.

In attempting to analyze with a view towards simplification of procedures and controls, one point became apparent almost at once. This was the fact that it was rather difficult and, in some instances, impractical to compare existing Air Force practices in the Facilities Contract program with those utilized by private industry for operations which were to yield similar results. The main reason for this appeared to be the fact that premises on which the Air Force procedures were based not only had to take into consideration the economy aspect of the particular situation, but public policy considerations as well. Thus maximum protection or security of the taxpayer dollar might rank higher in importance than slightly decreased administrative costs.
The constructive implications of this thesis are important when viewed from the alarmingly increasing rate of government expenditures in recent years.

First, attention has been directed to the Facilities Contract specifically. It cannot be said that the criticism or analysis included herein is useless because it has been leveled at too broad a field to be constructive. If accomplishing no more than the stimulation of an interest in the Air Force Facilities Contract with a view towards modern, efficient administration, this thesis will have been well worth the time of preparation and render a great service to the already overburdened American taxpayer for, at last, help will be on its way.

Second, many avenues for possible cost savings have been pointed out which should be given serious consideration by the people who are concerned primarily with setting up and administering the Air Force Facilities Contract program. Every dollar savings, when multiplied by the large number of Air Force Facilities Contracts in existence or to be issued in the future, will add up to a considerable sum, and will mean one less dollar to be paid in taxes. In addition to pure cost savings, there will be a streamlining of procedures which will allow the Government to procure its supplies and services faster from the standpoint of delivery, which fact would be extremely important particularly in time of national emergency. To generalize the findings of this study, it can be said that the Air Force Facilities Contract program, at present, is not badly organized or operated, particularly in view of the complexities involved and the fact that this program must be administered in conjunction with a number of others and coordinated, therewith. However, because this is so does not mean there is no room for improvement. In each particular phase of the program there is room for economies which have been specifically detailed in the body of this study.
Third, the value of analysis of any problem is particularly great as it tends to open up for discussion many additional avenues for improvement. If economies can be realized in this specific program, then it stands to reason that the same may be true of other governmental procedures and programs. An awakening of interest on the part of the general public in all phases of government expenditures is exceedingly important or we may lull ourselves into the apathy which has proven the economic downfall of nations who were once as strong as we. A study such as this, if conscientiously read, can provide the stimulation required to accomplish this purpose.

As regards the possible economies within this program, it is one thing to state what should be done and another to determine how this may be accomplished. Although the actual mechanics to be used for initiating the proposed revisions is beyond the scope of this study, it must be realized that the task is only half done once these points have been determined.

Possible methods which could be used for affording the drive to incorporate revisions outlined, herein, would be listed in order of Probability, Public Opinion, Self Analysis and Action by the Air Force, and Legislative Action including special committees such as the Hoover Commission.

Public Opinion is probably the most effective weapon once it has been aroused to the point of being heard. Governmental officials depend upon public support for their livelihood and retention of office; consequently, they are sensitive to the feelings of the general public. The major drawback in this area is, of course, the apathy of the people in regard to specific instances, as well as their ignorance of the facts in many cases. One can insist on corrective action only if one is aroused and has the facts necessary on which to base an intelligent argument. Unless
these facts are brought forcibly to the attention of the people through studies such as this, little action can be expected from this source.

Self-analysis on the part of the Air Force is a process which is going on continuously as evidenced by the many revisions to the "Armed Services Procurement Regulations" and the "Air Force Procurement Instructions". However, closer coordination is necessary between personnel who are charged with the responsibility for these revisions and representatives of private industry who can and are willing to contribute their wealth of experience and knowledge.* Until the feeling that both parties are on opposite sides of the fence can be dissipated and the realization made that there is a common objective involved, the prospect is not encouraging for any sweeping or radical changes in the Facilities Contract program from this source.

Legislative action is, of course, the most direct possible means for initiating economies within the system. However, as previously stated in this study, Congress must consider a great many complex problems and as such does not have the time to minutely scrutinize all phases of any one particular program. There are many considerations of far greater importance which must be dealt with first. The establishment of special committees such as the Hoover Commission is a step in the right direction, however even in this instance the committee must concern itself with broad overall policies and cannot confine itself to specific details. In addition, special committees are looked down upon with considerable disfavor by many representatives of the government and are, therefore, handicapped in execution of their duties as well as initiation of their recommendations into law.

One bright prospect has appeared recently in this

* 7, p. 7
respect when Senator Leverett Saltonstall (R-Mass.) introduced a measure aimed at streamlining military procurement policy to Congress. In spite of defeat of a similar bill in August 1958, the Senator has won broad general support and it is possible that congress will attempt to effect at least some economies in this area within the near future.*

The prospects for economic revisions, therefore, are not entirely black. The growing unrest of the overburdened taxpayer is causing concern in a number of sources and it may someday spur into action the various controlling groups. At that time, a study such as this might be of help in detailing those inroads which will most assuredly bring about "More Air Force per Dollar".

* 9
DEPARTMENT OF DEFENSE
NEGOTIATED CONTRACT

SPECIAL FACILITIES CONTRACT
between
THE UNITED STATES OF AMERICA
(DEPARTMENT OF THE AIR FORCE)
and
WYMAN-GORDON COMPANY
of
North Grafton, Massachusetts

Purpose: Facilities for the performance of Contract No. AF 33(600)-36176.

Issuing Office: Headquarters, Air Materiel Command, Wright-Patterson Air Force Base, Ohio (MCPEIF).

Office of USAF Administration: The Chief, Boston Air Procurement District, Boston Army Base, Boston, Massachusetts.

THIS CONTRACT is entered into as of 8 November 1957, by and between the United States of America, hereinafter called the Government, represented by the Contracting Officer executing this contract, and

WYMAN-GORDON COMPANY
(Name of Contractor)

(i) a corporation organized and existing under the laws of the State of Massachusetts

hereinafter called the Contractor. The parties hereto agree upon the terms and conditions set forth herein.

MDP 71-665 (Ow)
(1 May 53)
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THIS CONTRACT CONSISTS OF THE FOLLOWING:

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AF 33(600)-36321
PREAMBLE

The Government and the Contractor have entered into Contract Nr. AF 33(600)-36176, providing, among other items, for the evaluation and testing of a numerically controlled profile milling machine, and development of production methods therewith.

It is the purpose of this instrument to furnish such machine to the Contractor.
GENERAL PROVISIONS

CLAUSE 1 - DEFINITIONS

As used throughout this contract, the following terms shall have the meanings set forth below:

A. The term "Secretary" means the Secretary, the Under Secretary, or any Assistant Secretary of the Department and the head or any assistant head of the executive agency; and the term "his duly authorized representative" means any person or persons or board (other than the Contracting Officer) authorized to act for the Secretary.

B. The term "Contracting Officer" means the person executing this contract on behalf of the Government, and any other officer or civilian employee who is a properly designated Contracting Officer; and the term includes, except as otherwise provided in this contract, the authorized representative of a Contracting Officer acting within the limits of his authority.

CLAUSE 2 - FACILITIES TO BE FURNISHED

A. Government-owned facilities to be furnished are set forth in the Schedule. Such property shall become subject to all the terms and conditions hereof upon receipt thereof by the Contractor unless otherwise provided in the Schedule.

B. Such facilities shall be provided without warranty express or implied on the part of the Government as to serviceability or fitness for use, subject to the right of the Contractor reasonably to inspect and reject the same for good and sufficient reason. All personal property included in the facilities provided pursuant to this contract not presently located at the location specified in the Schedule, will be delivered to the Contractor at such location or at the point nearest thereto that rail carrier service is available as soon as practicable after the date this contract becomes effective, transportation charges prepaid.

CLAUSE 3 - FACTUAL APPENDICES

Within three months after the date this contract becomes effective, and at three-month intervals thereafter during the life of this contract, Contractor shall submit a list of the facilities provided hereunder and not previously listed, together with a list of any necessary changes or deletions of items on previous lists, provided, however, that no such lists shall be required for any period in which there have been no additions to or changes or deletions of previous listings. Such lists will be identified as "Factual Appendix A" to this contract or supplements to such appendix. They will contain a list of Government-furnished property provided hereunder and shall be in a form to be agreed upon between the Contractor and the Contracting Officer. Such lists shall be certified as correct by a responsible representative of the Contractor. Upon approval and distribution thereof such lists shall be considered incorporated herein by reference, it being understood, however, that such lists will be binding upon the parties hereto only to the extent that they do not conflict with the supporting documentation.
CLAUSE 4 - REPORTS TO BE FURNISHED BY THE CONTRACTOR

The Contractor, insofar as it is able, shall furnish the Government, upon written request therefor, such reports, estimates and other information regarding the subject matter of this contract as the Contracting Officer finds necessary and reasonable, including such records and data with respect to such facilities as may be required by the Contracting Officer for industrial planning or other purposes. Requests for such reports, estimates and other information shall set forth the nature of the information sought and the form in which such information is to be furnished.

CLAUSE 5 - USE AND CHARGES THEREFOR

A. Subject to the termination provisions hereof, the Contractor may use all or part of the facilities provided hereunder without charge in the performance of (i) any Air Force prime contract which expressly authorizes such no-charge use or states that the price or fee thereunder is contingent upon such no-charge use, (ii) subject to the approval of the Contracting Officer, any subcontract under any Air Force prime contract when both the prime contract and the subcontract either expressly authorize such no-charge use in the performance of the subcontract or state that the prices or fees thereunder are contingent upon such no-charge use, and (iii) to the extent such use will not interfere with the foregoing and subject to the approval of the Contracting Officer, (a) any other Government prime contract which expressly authorizes such no-charge use or states that the price or fee thereunder is contingent upon such no-charge use, and (b) any subcontract under any other Government prime contract where both the prime contract and the subcontract either expressly authorize such no-charge use in the performance of the subcontract or state that the prices or fees thereunder are contingent upon such no-charge use; provided, that this Paragraph A shall not apply to any subcontract below the first tier unless that subcontract and all intermediate subcontracts either expressly authorize such no-charge use in the performance of such lower tier subcontract or state that the prices or fees thereunder are contingent upon such no-charge use. Evidence relative to the terms of the supply contracts and subcontracts hereunder pursuant to which any use of facilities is made or proposed under this Paragraph A shall be submitted to the Contracting Officer by the Contractor herein upon request.

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The Contractor may also, with the prior approval of the Contracting Officer, use the facilities provided hereunder in the performance of work other than that hereinabove authorized, to the extent that such additional work will not interfere with the performance of the work hereinabove authorized, provided that the Contracting Officer determines that such other use is in the interest of the Government, and that the Contractor is not thereby placed in an unfavored competitive position. At six months intervals during the life of the contract and at the termination hereof the Contractor shall submit a detailed report to the Contracting Officer of all such other use performed during the preceding period, if there has been no such other use during the preceding period, shall submit a certificate to that effect. Such reports shall be supported by such records as are necessary to insure equitable action hereunder. Upon submission of such report the Contractor and the Contracting Officer will promptly negotiate to determine the extent of use during the period covered by such report to the contract therefor. Such amount shall be computed upon the basis of the extent of the use at rates based upon actual or estimated original acquisition cost of the facilities involved. Such rates shall be 5% per annum for land and land improvements, 8% per annum for buildings and building installations, 12% per annum for machinery and equipment, and 25% per annum for portable tools and automatic equipment. In the event of a failure to agree in such negotiations the resulting dispute shall be settled in accordance with the procedures provided in the Clause hereof entitled "Disputes." The Contractor shall upon demand of the Contracting Officer except in the event an appeal is pending or to be filed, forward his claim to the Contracting Officer payable to the Treasurer of the United States for the amount set forth. (See Item 1, Clause 25)
C. The Contractor represents that it has eliminated or will eliminate from the prices and, for the purpose of computing fees, from the estimated cost, charged for all contracts to be performed by the Contractor using facilities provided hereunder on a no-charge basis any charges or allowances (including amortization and depreciation) included therein for the facilities provided hereunder exclusive of charges for costs incurred in the performance of obligations imposed hereunder, and in making application for permission to use facilities provided hereunder, the Contractor shall so state. It is agreed that nothing in this contract shall be interpreted as prejudicing any rights that the Contractor may have to be reimbursed under other contracts between the parties hereto for the cost of performing obligations imposed hereunder and not made reimbursable hereunder.

CLAUSE 6 - TAXES AND UTILITIES

A. The Contractor agrees to pay when and as the same become due and payable, all taxes, assessments and similar charges which at any time prior to the final settlement of this contract are properly and legally taxed, assessed or imposed upon the Contractor's interest made or created pursuant to the provisions of this contract, with respect to part or all of the facilities provided hereunder or the use thereof.

B. The Contractor agrees to pay all claims or charges for or on account of water, light, heat, power and any other services or utilities furnished to or with respect to the site, buildings, or the machinery and equipment or any part thereof.

CLAUSE 7 - INSPECTION AND ACCESS

The Government shall at all reasonable times have access to the premises wherein any of the facilities provided hereunder are located for the purpose of inspecting and inventorying the same, of removing them as authorized hereunder, or for determining compliance with the terms of this contract.

CLAUSE 8 - RECORDS

The Contractor agrees to maintain an adequate property control records and a system of identification of the facilities provided hereunder in accordance with the provisions of the Manual for Control of Government Property, in all aspects of Contractor's interest on the date of this contract. As part of such control system Contractor agrees to prepare a logical inventory of the facilities provided hereunder at least once a year. Each of such inventory will be made and properly identifying all losses and damages which have occurred since the taking of the last previous inventory shall be delivered to the Contracting Officer upon the completion of each such inventory. (See Item 2, Clause 25).

CLAUSE 9 - TERMINATION

A. This Contract may be terminated by the Government as to all or any of the facilities provided hereunder (i) whenever the Contracting Officer shall determine that the facilities to be so terminated are not necessary for the performance of Government contracts, (ii) whenever the Commander, Air Materiel Command, or his duly authorized agent, has requested priority with respect to the manufacture or furnishing of any products with facilities to be provided hereunder and the Contractor has failed or refused to give such priority, (iii) whenever a receiver or trustee has been appointed for the Contractor or its property, or the Contractor has made assignment for the benefit of creditors, or the Contractor has become insolvent, or a petition has been filed by or against the Contractor pursuant to any of the provisions of the United States Bankruptcy Act, as amended, for the purpose of adjudicating the Contractor a bankrupt or for a reorganization of the Contractor or for the purpose of effecting a composition or a rearrangement with the Contractor's creditors and such petition filed against the Contractor was not dismissed within sixty (60) days.
(iv) whenever there has been a violation of the terms, conditions or covenants of this contract or extension thereof by the Contractor and the Contractor failed to cure such violations within thirty (30) days from the date of notice thereof by the Government to the Contractor, or (v) upon not less than sixty days notice to the Contractor for any other reason. Such termination shall be effected by delivery to the Contractor of a written notice of termination specifying the extent to which the contract is to be terminated and the reason therefor if under (i), (ii), (iii), or (iv) hereof, and shall be effective upon the date or dates specified therein.

B. This contract may be terminated by the Contractor at any time, upon not less than sixty days' notice to the Government, as to all of the facilities provided hereunder. Such termination shall be effected by delivery to the Contractor to the Contracting Officer of a written notice of termination specifying the date on which such termination shall become effective. Contractor may also by agreement with the Contracting Officer effect a partial termination of this contract with respect to any portion of such facilities. Termination at the option of the Contractor shall not relieve the Contractor of any of its obligations or liabilities under any other Government contract.

C. Within 30 days after the effective date of a total or partial termination of this contract, the Contractor shall account for all facilities with respect to which the contract is terminated. Within 90 days after the Contractor accounts for such facilities, the Contracting Officer shall notify the Contractor as to the disposition of such facilities. The Contractor thereupon shall, as directed by the Contracting Officer, prepare, protect, remove, or ship such facilities and in connection therewith shall clean, drain all coolants from, cover with light preservatives, perform necessary crating and skidding, and load on cars or trucks in accordance with the requirements of the carrier such item or items of property so that such property will reach the destination specified in good condition, and such work shall be performed at no cost to the Government, except to the extent that such costs may be reimbursed under other contracts between the parties hereto. Transportation from the location where the property is located or point nearest thereto that rail carrier service is available shall be by Government bill of lading. If the Contracting Officer fails to notify the Contractor as to disposition of the facilities within the ninety (90) day period, herein provided, the Contractor may, upon reasonable notice to the Government, remove and store elsewhere at Government risk and expense any of the terminated facilities which may be located within the premises of the Contractor. The Government shall have a corresponding right, upon reasonable notice, to remove and place in storage for the account of the Contractor any property, title to which is not in the Government which has not been removed from any Government-owned plant or building provided hereunder at the time of the surrendering of possession thereof.

D. Any termination under the provisions of this clause shall be without cost to the Government.

CLAUSE 10 - CONTINUING PLANT CLEARANCE

A. The Contractor shall notify the Contracting Officer whenever it is determined that any property provided hereunder is excess to the requirements of the using Government contract or is worn out, obsolete, damaged or otherwise unserviceable (whether or not under circumstances rendering the Contractor liable therefor). The Contracting Officer may permit any portion, or all, of such property under the contract to remain in the possession of the Contractor pending total or partial termination thereof or may from time to time require the Contractor to dispose of such facilities as provided in Paragraph C of the clause entitled "Termination" of this contract.

B. The Government may but is not obligated to replace any items disposed of pursuant to the provisions of Paragraph A hereof.

C. With the approval of the Contracting Officer, the Contractor may purchase any unserviceable property including scrap to be disposed of pursuant to the terms of this clause upon such terms and conditions as the Contracting Officer may approve. Payments due for any such purchase shall be paid in such manner as the Contracting Officer may direct.
CLAUSE 11 - DISPUTES

Except as otherwise provided in this contract, any dispute concerning a question of fact arising under this contract which is not disposed of by agreement shall be decided by the Contracting Officer, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Contractor. Within 30 days from the date of receipt of such copy, the Contractor may appeal by mailing or otherwise furnishing to the Contracting Officer a written appeal addressed to the Secretary, and the decision of the Secretary or his duly authorized representative for the hearing of such appeals shall, unless determined by a court of competent jurisdiction to have been fraudulent or arbitrary or capricious or so grossly erroneous as necessarily to imply bad faith or not supported by substantial evidence, be final and conclusive; provided that, if no such appeal is taken, the decision of the Contracting Officer shall be final and conclusive. In connection with any appeal proceeding under this clause, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its appeal. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the contract and in accordance with the Contracting Officer's decision.

CLAUSE 12 - CONVICT LABOR

In connection with the performance of work under this contract, the Contractor agrees not to employ any person undergoing sentence of imprisonment at hard labor.

CLAUSE 13 - EIGHT-HOUR LAW OF 1912

This contract, to the extent that it is of a character specified in the Eight-Hour Law of 1912 as amended (40 U.S. Code 324-326) and is not covered by the Walsh-Healey Public Contracts Act (41 U.S. Code 35-45), is subject to the following provisions and exceptions of said Eight-Hour Law of 1912 as amended, and to all other provisions and exceptions of said Law:

No laborer or mechanic doing any part of the work contemplated by this contract, in the employ of the Contractor or any subcontractor contracting for any part of said work, shall be required or permitted to work more than eight hours in any one calendar day upon such work, except upon the condition that compensation is paid to such laborer or mechanic in accordance with the provisions of this clause. The wages of every such laborer and mechanic employed by the Contractor or any subcontractor engaged in the performance of this contract shall be computed on a basic day rate of eight hours per day; and work in excess of eight hours per day is permitted only upon the condition that every such laborer and mechanic shall be compensated for all hours worked in excess of eight hours per day at not less than one and one-half times the basic rate of pay. For each violation of the requirements of this clause a penalty of five dollars shall be imposed upon the Contractor for each such laborer or mechanic for every calendar day in which such employee is required or permitted to labor more than eight hours upon said work without receiving compensation computed in accordance with this clause; and all penalties thus imposed shall be withheld for the use and benefit of the Government.
CLAUSE 14 - NONDISCRIMINATION IN EMPLOYMENT

A. In connection with the performance or work under this contract, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, religion, color, or national origin. The aforesaid provision shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of the nondiscrimination clause.

B. The Contractor further agrees to insert the foregoing provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

CLAUSE 15 - OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

CLAUSE 16 - COVENANT AGAINST CONTINGENT FEES

The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty the Government shall have the right to annul this contract without liability or in its discretion to deduct from the contract price or consideration the full amount of such commission, percentage, brokerage, or contingent fee.

CLAUSE 17 - TITLE

Title to all property furnished by the Government hereunder shall remain in the Government and such property shall remain personalty although affixed to realty not belonging to the Government.

CLAUSE 18 - POSSESSION

Except as otherwise in this contract specifically provided, the Contractor shall not remove or otherwise part with the possession of any of the facilities provided hereunder, pledge or assign, transfer or purport to transfer title to any of such facilities in any manner to any third person either directly or indirectly, permit the use by others of any of such facilities, nor do or suffer anything to be done whereby any of such facilities may be seized, taken in execution, attached, destroyed or injured.
CLAUSE 19 - LIABILITY FOR GOVERNMENT-OWNED PROPERTY

A. The Contractor shall be responsible for any loss or damage including expenses incidental thereto, to the facilities provided hereunder:

(i) which results from a risk expressly required to be insured against hereunder, but only to the extent of the insurance so required to be procured and maintained or to the extent of insurance actually procured and maintained, whichever is greater;

(ii) which results from a risk which is in fact covered by insurance or for which the Contractor is otherwise reimbursed, but only to the extent of such insurance or reimbursement;

(iii) which results from willful misconduct or lack of good faith on the part of any of the Contractor's directors or officers, or on the part of any of its managers, superintendents, or other equivalent representatives, who has supervision or direction of (A) all or substantially all of the Contractor's business, or (B) all or substantially all of the Contractor's operations at the industrial facility if such facility is a complete plant or unit, or (C) all or substantially all of the Contractor's operations at any one plant or separate location in which such industrial facilities are installed or located, or (D) any separate or complete major industrial operation in connection with which the facilities are used; or

(iv) which results from a failure on the part of any of the Contractor's directors, officers, or other representatives mentioned in (iii) above, (A) to maintain and administer, in accordance with sound industrial practices, a program for the maintenance, repair, protection and preservation of the industrial facilities, in accordance with the clause hereof entitled "Maintenance", so as to assure their full availability and usefulness at all times, or (B) to take all reasonable steps to comply with any appropriate written directions or instructions which the Contracting Officer may prescribe as reasonably necessary for the protection of the industrial facilities, provided, that, with respect to any such loss or damage caused by an excepted peril, the Contractor shall be liable under this subparagraph (iv) only where such a failure of the Contractor's representative, as set forth herein, results from his willful misconduct or lack of good faith.

For the purposes of this clause the term "excepted peril" is defined as any of the following perils while the property is on the Contractor's or subcontractor's premises, or on any other premises where such property may properly be located, or by removal therefrom because of any of the following perils:

(i) Fire; lightning; windstorm; cyclone; tornado; hail; explosion; riot; riot attending a strike; civil commotion; vandalism and malicious mischief; sabotage; aircraft or objects falling therefrom; vehicles running on land or tracks, excluding vehicles owned or operated by the Contractor or any agent or employee of the Contractor; smoke; sprinkler leakage; earthquake or volcanic eruption; flood, meaning thereby rising of a body of water; hostile or warlike action, including action in hindering, combating, or defending against an actual, impending or expected attack by any Government or sovereign power (de jure or de facto), or by any authority using military, naval, or air forces, or by an agent of any such government, power, authority, or forces; or

(ii) Other peril, of a type not listed above, if such other peril is customarily covered by insurance (or by a reserve for self-insurance) in accordance with the normal practice of the Contractor, or the prevailing practice in the industry in which the Contractor is engaged with respect to similar property in the same general locale.
B. The Contractor represents that it is not including and agrees that it will not hereafter include in any price to the Government, any charge or reserve for insurance (including self insurance funds or reserves) covering loss or destruction of or damage to the facilities provided hereunder caused by an excepted peril.

C. Upon the happening of loss or destruction of or damage to any Government property the Contractor shall notify the Contracting Officer thereof, and shall communicate with the Loss and Salvage Organization, if any, now or hereafter designated by the Contracting Officer, and with the assistance of the Loss and Salvage Organization so designated (unless the Contracting Officer has directed that no such organization be employed), shall take all reasonable steps to protect the Government property from further damage, separate the damaged and undamaged Government property, put all the Government property in the best possible order, and furnish to the Contracting Officer a statement of: (A) the lost, destroyed and damaged Government property, (B) the time and origin of the loss, destruction or damage, (C) all known interests in commingled property of which the Government property is a part, and (D) the insurance, if any covering any part of or interest in such commingled property. The Contractor shall be reimbursed for the expenditures made by it in performing its obligations under this paragraph C (including charges made to the Contractor by the Loss and Salvage Organization, except any of such charges the payment of which the Government has, at its option, assumed directly), to the extent approved by the Contracting Officer and set forth in a Supplemental Agreement.

D. In the event the Contractor is reimbursed or compensated for any loss or destruction of or damage to the facilities provided herein caused by an excepted peril, it shall equitably reimburse the Government. The Contractor shall do nothing to prejudice the Government's rights to recover against third parties for any such loss, destruction or damage and, upon the request of the Contracting Officer, shall at the Government's expense, furnish to the Government all reasonable assistance and cooperation (including the prosecution of suit and the execution of instruments of assignment in favor of the Government) in obtaining recovery.

CLAUSE 20 - MAINTENANCE

Except to the extent of any loss or destruction of or damage to the facilities provided hereunder for which the Contractor is relieved of liability under the provisions of the clause hereof entitled "Liability for Government-owned Property" and except for reasonable wear and tear or depreciation, the facilities shall be returned by the Contractor to the Government, or delivered by the Contractor to any designee of the Government (at the time elsewhere in this contract provided) in as good condition as when received or restored by the Contractor in connection with this contract. The Contractor shall also maintain a program approved by the Contracting Officer for the proper maintenance, repair, protection, and preservation thereof in accordance with sound industrial practice, including normal parts replacements and, with respect to machinery and equipment, necessary rebuilding and rehabilitation. The maintenance of any motor vehicles provided under this contract shall be in accordance with standards prescribed by the Air Force as directed by the Contracting Officer. As soon as practical after the execution of this contract the Contractor shall submit to the Contracting Officer for approval a detailed statement of the maintenance program proposed to be maintained under the requirements of this clause. Upon approval thereof by the Contracting Officer such program shall not be relaxed or deviated from without the prior approval of the Contracting Officer.
CLAUSE 21 - RIGHT OF DIVERSION

The Government reserves the right when it is determined by the Air Force to be in the best interest of the Government, to divert any or all of the facilities furnished to the Contractor hereunder to locations other than those specified in this contract. When any such diversion is effected, the Contracting Officer may require the Contractor forthwith to dispose of the diverted facilities in its possession as provided in Paragraph C of the Clause hereof entitled "Termination".

CLAUSE 22 - RESPONSIBILITY FOR DAMAGES

A. The Contractor shall hold the Government harmless against claims for injury to persons or damage to property of the Contractor or others arising from the Contractor's possession or use of the facilities provided hereunder, except when there is in effect one or more contracts with Contractor for supplies or services which require the use of such facilities. The provisions of such contracts shall govern the assumption of liability for such claims arising out of or related to the performance of each such contract and involving the possession and use of the facilities provided hereunder.

B. The Government shall not be liable to the Contractor for damage or loss of profits by reason on nondelivery or of any delay in the delivery of any or all of the facilities to be provided by the Government hereunder; provided, however, that notwithstanding the foregoing a specific provision for an appropriate equitable adjustment to include without limitation time of delivery and price, may be included in any supply or service contract which may be effected by any such nondelivery or delay.

CLAUSE 23 - RESERVATION OF RIGHTS

The failure of the Government to insist in any one or more instances, upon the performance of any of the terms, covenants or conditions of this agreement shall not be construed as a waiver or a relinquishment of the future performance of any term, covenant or condition, but Contractor's obligation with respect to such performance shall continue in full force and effect.

CLAUSE 24 - GRATUITIES

A. The Government may, by written notice to the Contractor, terminate the right of the Contractor to proceed under this contract if it is found, after notice and hearing, by the Secretary or his duly authorized representative, that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer or employee of the Government with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such contract: provided, that the existence of the facts upon which the Secretary or his duly authorized representatives makes such findings shall be in issue and may be reviewed in any competent court.

B. In the event this contract is terminated as provided in paragraph A hereof, the Government shall be entitled (i) to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the contract by the contractor, and (ii) as a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by the Secretary or his duly authorized representative) which shall be not less than three nor more than ten times the costs incurred by the Contractor in providing any such gratuities to any such officer or employee.

C. The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

CLAUSE 25 - ALTERATIONS IN CONTRACT

The following alterations have been made in the provisions of this contract:

AF 33(600)-36321
Item 1 - Paragraph B, Clause 5 is deleted and the following substituted therefor:

"B. Pending further amendment of this contract, the facilities provided under Item 1, Part 1 of the Schedule may only be used in the performance of Contract Nr. AF 33(600)-36176, in accordance with Paragraph A of this Clause."

Item 2 - Clause 8 is deleted and the following substituted therefor:

"CLAUSE 8 - PROPERTY CONTROL RECORDS

"The Contractor shall maintain adequate property control records, a system of physical inventory, and a system of identification of the facilities provided hereunder in accordance with the provisions of the 'Manual for Control of Government Property in the Possession of Contractors' (ASPR Appendix 'B') in effect on the date of this contract. As regards stock listed items, the Contractor shall also carry out a written program approved by the Contracting Officer for the support of Air Force industrial equipment central inventory control procedures including the following actions: (i) the keeping of historical records of the condition and maintenance of stock listed items; (ii) the annual reconciliation by the Contractor of his property records with a machine listing to be provided by the Government of Air Force Central Inventory Control Records and the submission to the Government of documents necessary to correct such machine listings; and (iii) the preparation and maintenance of the Central Inventory Control Reports approved by the Bureau of the Budget. In formulating the foregoing program the Contractor shall use as a guide AMC Manual 69-1 'Procedures for the Control of Government-owned (USAF) Industrial Equipment for support of the Air Force Production Program' as amended and supplemented. Necessary changes to such program as required by changes in Air Force procedures will be made from time to time."
Part 1 - Equipment Furnished by the Government (See Clause 2)

Item 1: One (1) Kearney and Trecker numerically controlled profile milling machine, AF Nr. 130298.

Part 2 - Location of Facilities (See Clause 3)

The Government-owned plant at North Grafton, Massachusetts, known as Air Force Plant Nr. 63, leased to the Contractor.
The rights and obligations of the parties to this contract shall be subject to and governed by the Schedule and the General Provisions. To the extent of any inconsistency between the Schedule or the General Provisions, and any specifications or other provisions which are made a part of this contract by reference or otherwise, the Schedule and the General Provisions shall control. To the extent of any inconsistency between the Schedule and the General Provisions, the Schedule shall control.

The Contractor represents that the aggregate number of employees of the Contractor and its affiliates is: □ 500 or more, □ less than 500.

IN WITNESS WHEREOF, the parties hereto have executed this contract as of the day and year first above written:

THE UNITED STATES OF AMERICA

By.../s/ Andrew J. Nutter...

(Contracting Officer)

WITMAN-GORDON COMPANY

(Contractor)

By.../s/ Robert W. Stoddard...

President

(Worcester, Massachusetts)

NOTE.—In case of corporation, witnesses not required but certificate below must be completed. Type or print names under all signatures.

CERTIFICATE

I, ........................................................., certify that I am the

(Signature)

(Signature)

(Signature)

(Corporate Seal)

AF 33(600)-36321

(APPROVED)

[Signed]
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II. Booklets, Pamphlets, & Publications of Associations

III. Newspapers & Periodicals
11. Who Gets the 83 Billions, March 1, 1958. Newsweek
IV. Publications of Government Agencies and Departments


V. Personal Sources of Information, Correspondence, Interviews

18. Personal experience as Assistant Purchasing Agent, Wyman-Gordon Company, North Grafton Plant.


20. Interview with Contracting Officer, Boston Air Procurement District.

21. Interview with Property Administrator, Boston Air Procurement District.

22. Interview with Quality Control Specialist, Boston Air Procurement District.

23. Interview with Production Specialist, Boston Air Procurement District.