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AUTHORITY
FAA ltr, 10 Oct 1972

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(14) *HC*
PWA-PP-66-100
(11) SEPTEMBER 1966
(12) 136 p.

(6) ENGINE PROPOSAL
FOR PHASE III OF THE
SUPERSONIC TRANSPORT DEVELOPMENT PROGRAM

**WORK STATEMENT
AND
CONTRACT,**

(15) FA-SS-66-8



(COMPETITIVE DATA)

PREPARED FOR
FEDERAL AVIATION AGENCY
OFFICE OF SUPERSONIC TRANSPORT DEVELOPMENT
WASHINGTON, D. C.

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JAN 9 - 1967
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Pratt & Whitney Aircraft
FLORIDA RESEARCH AND DEVELOPMENT CENTER

DIVISION OF UNITED AIRCRAFT CORPORATION

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INTRODUCTION

This section of our Proposal for the engine portion of Phase III of the United States' Supersonic Transport Development Program contains our proposed Contract for the work. The Work Statement is Exhibit "A" of the Contract.

Two Contracts have been executed by us; one assuming The Boeing Company is selected as the Aircraft Contractor for Phase III and the other assuming the Lockheed Aircraft Corporation is selected as the Phase III Aircraft Contractor. Our proposal is contingent on the understanding that only one Airframe Contractor will be named for Phase III and that this Contractor will be the sole engine contractor for Phase III. Both contracts, and the schedules contained in them, assume that we will have been authorized to proceed with long lead time item procurement by September 30, 1966.

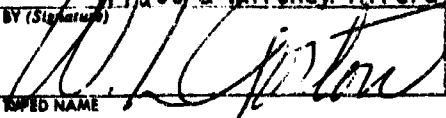
The Contracts incorporate substantially the same terms and conditions as the Model Contract of the Request for Proposal dated June 30, 1966. A number of clarifications of language and changes have been made to more clearly express what we believe to be the intent of the parties.

Compatibility Agreements have also been signed with each of the present Aircraft Contractors covering coordination during Phase III. The SST Aircraft System Responsibility Agreement dated August 5, 1966, between us and The Boeing Company and the SST Airframe/Engine Compatibility Agreement dated August 19, 1966, between us and the Lockheed Aircraft Corporation will be submitted for review by the Contracting Officer by the Aircraft Contractors.

* * *

Article VII(B)(2) of the Contract states that necessary on-hand Government facilities may be made available to the Contractor during Phase III in accordance with the Contractor's request in its Phase III proposal. By letter dated 13 July 1966 sent via the FAA, the Contractor has requested the Air Force to make available excess water capacity from Air Force Plant No. 74 for use in performing engine and component cooling operations under Phase III. Plant No. 74 is located adjacent to the Florida Research and Development Center, and raw water is supplied to Plant No. 74 through a Government-owned 21-inch pipe line from the St. Lucie Canal. The details concerning use of this Government facility are described in the letter referred to above. The assistance of the FAA is requested in obtaining Air Force/General Services Administration approval to use, on a non-interference basis, the above pipe line in the performance of Phase III.

Best Available Copy

FEDERAL AVIATION AGENCY NEGOTIATED CONTRACT				CONTRACT NO.	
CONTRACT TYPE ☐ FIRM FIXED PRICE ☐ FIXED PRICE INCENTIVE ☐ FIXED PRICE REDETERMINABLE ☐ COST PLUS FIXED FEE ☐ COST NO FEE ☒ OTHER (Specify) Cost Share				DATE OF CONTRACT January 1, 1967	
				NEGOTIATED PURSUANT TO 41 USC 252(c)(11)	
ISSUING OFFICE (Name and Address) Federal Aviation Agency Office of Supersonic Transport Development 800 Independence Avenue SW Washington, D. C. 20553			CONTRACTOR (Name and Address) United Aircraft Corporation Pratt & Whitney Aircraft Division Florida Research and Development Center Post Office Box 2691 West Palm Beach, Florida 33402		
CONTRACT FOR Development of Supersonic Transport Aircraft - Phase III				AMOUNT \$290,087,000.00	
DELIVERY F. O. B.	DESTINATION ☒ OTHER (See Schedule)	DISCOUNT TERMS None	MAIL INVOICES in quintuplicate to: Federal Aviation Agency, AU-10 800 Independence Avenue SW Washington, D. C. 20553		
TIME OF DELIVERY See schedule.					
FURNISH TO (Name and Address) See schedule.			REG. NO. - ACCOUNTING AND APPROPRIATION DATA CSAD 69 X 1358 PRN		
TYPE OF BUSINESS (Check appropriate box(es) in accordance with representation made by contractor in his proposal)					
☐ INDIVIDUAL		☐ JOINT VENTURE		☐ PARTNERSHIP	
☒ CORPORATION, INCORPORATED IN THE STATE		Delaware		☐ SMALL BUSINESS	
FOR SUPPLIES ONLY:		☐ REGULAR DEALER		☐ LABOR SURPLUS AREA CONCERN	
The United States of America (hereinafter called the Government), represented by the Contracting Officer executing this contract, and the individual, partnership, joint venture, or corporation named above (hereinafter called the Contractor), mutually agree to perform this contract in strict accordance with the Schedule and the General Provisions identified below, and the specifications, drawings, and conditions enumerated in the Schedule or identified below. If there are inconsistencies between the Schedule and the General Provisions and any specification, drawing, or other condition, the Schedule and the General Provisions shall control. If there are inconsistencies between the Schedule and the General Provisions, the Schedule shall control. The Contractor represents (a) that he <u>has</u>, ☒ has not, employed or retained any company or person (other than a full-time bona fide employee working solely for the Contractor) to solicit or secure this contract, and (b) that he <u>has</u>, ☒ has not, paid or agreed to pay any company or person (other than a full-time bona fide employee working solely for the Contractor) any fee, commission, percentage or brokerage fee, contingent upon or resulting from the award of this contract; and agrees to furnish information relating to (a) and (b) above as requested by the Contracting Officer. Priority Rating: DX-A-1. In witness whereof, the parties hereto have executed this contract as of the date entered above.					
NAME OF CONTRACTOR UNITED AIRCRAFT CORPORATION Pratt & Whitney Aircraft Division			UNITED STATES OF AMERICA		
BY (Signature) 			DATE September 6, 1966		DATE
TYPED NAME W. L. Gorton			TYPED NAME		
TITLE General Manager Florida Research and Development			TITLE		

SCHEDULE

ARTICLE I. GENERAL

The work under this contract is the engine portion of Phase III of the program for the development of the United States' Supersonic Transport (SST) Aircraft. Under this phase, the Contractor shall continue the design work and testing begun under earlier phases of the SST Program and shall develop, fabricate, and test engines for two prototype aircraft. This work shall include engineering and support for an aggregate one hundred (100) hours of flight test of the prototype aircraft.

ARTICLE II. STATEMENT OF WORK

- A. The Contractor shall furnish the necessary personnel, materials, plant, and equipment (except as otherwise specified in this contract to be furnished by the Government) to develop the JTF17A-21B engine, to deliver ground test engines, prototype engines, engine spare parts, and ground support equipment, and to provide support of the prototype engines for the 100-hour aircraft flight test program ending May 31, 1970, all in accordance with the detailed Work Statement attached hereto as Exhibit "A".
- B. It is recognized that the Contractor has furnished to the Government a number of detailed "Plans" and "Programs" outlining the Contractor's current plans for accomplishing the work under this contract. It is further recognized that these are living documents, subject to change and updating by the Contractor as the work progresses. It is not the intention of the parties that the contract require the performance of the contract work necessarily as now set forth in these documents. Accordingly, it is agreed that reference to these documents in Exhibit "A" shall not be construed as effecting an incorporation of these documents by reference as a part of the Work Statement of the contract.
- C. If the Government desires the Contractor to support the 100-hour aircraft flight test program beyond the period specified in A. above, the Contractor agrees so to perform but any resulting change in the estimated cost and fee will be negotiated and incorporated into this contract by amendment.

ARTICLE III. COMPLETION OF WORK

All work hereunder, unless extended under Article II (C) above, shall be completed on or before May 31, 1970.

ARTICLE IV. CONSIDERATION AND PAYMENT

A. Payment

1. The total estimated cost for performance of this contract is \$290,087,000.00.

2. The Contractor shall also be credited with a fee of \$29,008,700.00 as follows: The fee shall not be paid, but shall be credited against the Contractor's cost share only to the extent that the Contractor incurs allowable costs hereunder. The amount of such fee credited with each payment to the Contractor shall bear the same ratio to the total fee as the allowable incurred costs for which the payment is made bear to the total contract estimated cost.

3. Except as may be otherwise provided herein, payment of the Contractor's costs shall be made in accordance with the clause of the General Provisions entitled "Allowable Costs, Fixed Fee and Payment", and in accordance with Subpart 1-15.2 of Part 1-15 of the Federal Procurement Regulations as in effect on the date of this contract; provided that all allowable costs hereunder shall be shared between the Contractor and the Government on the following basis: eighty percent (80%) to be paid by the Government and twenty percent (20%) to be paid by the Contractor, subject to the provisions of this Article IV.

4. The aforesaid cost sharing arrangement shall apply only until the incurred allowable costs are equal to the total estimated cost of the contract. To the extent the Government funds a cost overrun in excess of the total estimated contract cost, all such allowable overrun costs shall be shared between the Contractor and the Government on the following basis: seventy-five percent (75%) to be paid by the Government and twenty-five percent (25%) to be paid by the Contractor with no additional fee credit, subject to the provisions of this Article IV and Article XIII.

5. The Contractor shall not be reimbursed or credited hereunder for any cost incurred prior to the date of this contract; except that, in accordance with the provisions of Article VI (C) of Contract FA-SS-66-8, a credit shall be made toward the Contractor's share under each monthly voucher until the Contracting Officer determines that the approximate total credit due the Contractor under that Article has been paid. For the purpose of calculating this credit, "the sharing arrangements agreed upon for Phase III", as those words are used in Article VI (C) of Contract FA-SS-66-8, are agreed to be ninety percent (90%) Government, ten percent (10%) Contractor. Following final payment under Contract FA-SS-66-8, an appropriate adjustment of the amounts hitherto credited the Contractor hereunder shall be made to reflect

the exact credit due the Contractor. Notwithstanding any other provision of this contract, except as provided in Article XIII, the Government's liability hereunder shall not exceed eighty percent (80%) of the total allowable costs incurred plus appropriate amounts credited for fee, and for credit due under Phase II-C Contract FA-SS-66-8 in accordance with this paragraph.

B. Refund of Cost Sharing*

1. Termination for Convenience of the Government

If the Government terminates this contract for its convenience, the Contractor shall be refunded its share of allowable costs, without interest, as follows:

(a) All of its share of allowable costs under Contracts FA-SS-64-2, FA-SS-65-18, and FA-SS-66-8; and

(b) All of its share of allowable costs under this contract, less allocable fee credit.

*Wherever refund of the Contractor's share of Contract FA-SS-66-8 is referred to in this contract, it shall mean its share less any amounts credited in accordance with Article IV (A) (5) hereof and the clause in its Phase II-C contract entitled "Phase III Credit".

2. Termination for Default

If the Government terminates the contract because the Contractor defaults in performance of this contract in accordance with its terms, including the obligation to make satisfactory progress towards producing and testing the SST engine in accordance with the contract, the Contractor shall not be refunded any of its share of allowable costs under Contracts FA-SS-64-2, FA-SS-65-18, FA-SS-66-8, and this contract; provided that the Contractor shall not be required to refund to the Government allocable amounts previously credited to the Contractor as fee or Phase III credit hereunder.

3. Termination Due to Nonfunding of Contract Overrun

If the Government elects not to fund a cost overrun under this contract, the contract shall be terminated and the Contractor refunded seventy-five percent (75%) of its allowable cost share, less allocable fee credit, under Contracts FA-SS-64-2, FA-SS-65-18, FA-SS-66-8, and this contract.

4. Termination for Failure to Agree on Future Financial Plan

Refer to Article XII of this contract.

5. Limitation on Refund of Cost Share

The Government shall not be liable for refund of any costs which, when added to costs already paid or payable to the Contractor, exceed the following under each of the enumerated contracts:

- (a) for Contract FA-SS-64-2, a total amount of \$5,500,000.00
- (b) for Contract FA-SS-65-18, a total amount of \$5,010,000.00
- (c) for Contract FA-SS-66-8, a total amount of \$50,000,000.00
- (d) for this Contract FA-SS- , the amount currently funded.

C. Obligation Arising from Refund of Cost Share

Notwithstanding any other provision of this or any other contract, in the event the Contractor is refunded any of its cost share in accordance with Article IV (B) or Article XII of this contract, the Contractor shall:

1. Transfer to the Government all rights in all Subject Inventions under this contract, Contracts FA-SS-64-2, FA-SS-65-18, and FA-SS-66-8.

2. Convey title to all data resulting from performance of this contract, Contracts FA-SS-64-2, FA-SS-65-18, and FA-SS-66-8 to the Government, as required by the Contracting Officer.

3. When requested by the Contracting Officer, transfer to the Government all technical data, manufacturing information and "know-how" developed under contracts and subcontracts, the costs of which are refunded in whole or in part under paragraph B above or Article XII the contract. The Contractor shall also, upon request of the Government and upon receipt of the Government's agreement to pay allowable costs, provide necessary services, including reasonable access to and use of its personnel in order to assure the complete transfer of such data, information, and "know-how". Allowable costs for such transfer shall not include any costs for the generation of such data, information, and "know-how".

The Contracting Officer shall be entitled to exercise the above rights for a period of three years following the final payment under this contract.

In the event of such refund, the Government may preclude the Contractor from use of such data, patents, or "know-how" to the extent

exclusive rights thereto are required in the public interest and the foregoing shall be subject to the policy set forth in the letter of the Federal Aviation Agency Director, Supersonic Transport Development, dated October 14, 1965.

D. Special Cost Items

In determining the allowability under this contract of particular items of cost specified in Section 1-15 of the Federal Procurement Regulations, and in establishing overhead rates, the Federal Aviation Agency shall not necessarily be bound by arrangements with, or findings by, Contracting Officers or employees of other Government Agencies unless the Contracting Officer under this contract has been afforded an opportunity to participate with other agencies of the Government in joint negotiation or determination of such items or rates.

Notwithstanding any restrictions as to allowability under Section XV of the Federal Procurement Regulations, reasonable costs related to the commercial sale of the SST engine being developed under this contract will be considered allowable only to the following extent:

1. They must be approved in advance by the Contracting Officer after review and approval of the Contractor's plan and budget covering such items.
2. They must be within the maximum dollar limitation established in advance for these costs by agreement between the Government and the Contractor.

E. Segregation of Cost

The Contractor shall use an accounting system and procedures, satisfactory to the Contracting Officer, for the segregation, identification, and charging of all costs under this contract. This accounting system shall be based upon the Contractor's system in existence on September 6, 1966. Upon advance written notice to the Contracting Officer, the Contractor may make reasonable revisions thereto, in accordance with generally acceptable accounting procedures and the needs of the program. Except as segregated, identified, and charged in accordance with this system and these procedures, costs shall not be allowable under this contract.

F. Limitation of Government Obligation

1. This contract shall be incrementally funded to the extent that the Government makes funds available for payment of costs hereunder. The first increment of work shall commence January 1, 1967, and end ; the estimated cost of this increment including the Contractor's share is ; and the work to be performed shall consist of all work specified in the contract that reasonably can be performed, including meeting those milestones set forth in

Exhibit "A" to this contract scheduled to be met during this time in order to ensure orderly progress and timely completion of the work specified in this contract.

2. Succeeding increments of work may be authorized by written notice issued by the Contracting Officer specifying the work which can be reasonably performed during this time, generally in accordance with Exhibit "A" of this contract. The requirements of the notices shall be negotiated by the parties, and shall be in reasonably proportion to, related to, and permit an orderly progress in meeting the total contract work requirements within the time specified for performance of the contract. Failure to agree on any terms of the notice shall be a dispute as to a question of fact within the meaning of the "Disputes" clause of this contract.

3. If at any time during the performance of the work under this contract, the Contractor estimates that it will incur allowable costs in excess of the amount currently funded within the next succeeding ninety (90) days, the Contractor shall immediately notify the Contracting Officer, giving its estimate of costs, in excess of the amount currently funded, expected to be incurred prior to the date when the next incremental funding is to occur. If at any time the Contractor estimates that the total cost for the performance of this contract will be more than five percent (5%) greater or less than the total estimated contract cost, the Contractor shall immediately notify the Contracting Officer in writing, giving its estimate of such revised total estimated contract cost. The Government shall not be obligated to reimburse the Contractor for costs incurred in excess of the amount currently funded under the contract, and the Contractor shall not be obligated to continue performance under the contract or to incur costs in excess of the amount currently funded, until the Contracting Officer shall have notified the Contractor in writing that additional funds are available. When and to the extent such additional funds have been provided, any allowable costs incurred by the Contractor in excess of the previously funded amount shall be reimbursed in accordance with the terms of this contract.

4. In the event the Contractor is delayed by reason of the failure on the part of the Government to fund this contract at the time the Contractor is entitled to stop work by reason of unavailability of funds, the Contractor shall be entitled to an equitable adjustment in the contract schedule for the time loss resulting therefrom. In the event of failure by the Government to provide additional funds within thirty (30) days after the end of the current work increment or thirty (30) days after the time when the Contractor is entitled to stop work by reason of unavailability of funds, whichever is the later, the Government shall, upon written request by the Contractor, terminate the contract for convenience unless the Government elects to continue the program, in which event there shall be an equitable adjustment in the estimated cost, the schedule, and such other terms and conditions as may be appropriate.

5. The maximum cost to the Government hereunder, including termination liability, shall be \$261,078,300.00 plus the total amount due the Contractor for Phase III credit in accordance with Article IV (A) (5) hereof and Article VI (C) of Contract FA-SS-66-8. The Government shall not be obligated to reimburse the Contractor for costs incurred in excess of the total amount from time to time established as the maximum cost to the Government under this contract.

G. Funding for Phase IV

It is understood the milestones established for further development, certification and production of the United States' Supersonic Transport Aircraft under subsequent Phases of the Program are contingent upon the receipt by the Contractor of adequately funded contractual go-ahead for Phase IV by May 31, 1969.

ARTICLE V. ACCEPTANCE

Upon satisfactory completion of all work hereunder, acceptance of all items specified in Exhibit "A" to be delivered under this contract shall be made by the Contracting Officer.

ARTICLE VI. PHASE II SST PROPERTY

Other than facilities (the use of which is covered by Article VII), the Contractor and its subcontractors, subject to the provisions of this contract, are authorized to use in performance hereunder Government property, including special tooling and special test equipment, heretofore furnished to, acquired or manufactured by the Contractor and its subcontractors under Contracts FA-SS-64-2, FA-SS-65-18, and FA-SS-66-8. Federal Aviation Agency-owned property may be used on a no-charge basis by the Contractor in performance of work hereunder. Other Government property may be used on a no-charge, noninterference basis to the extent permitted by the cognizant Government agency.

ARTICLE VII. FACILITIES

A. Policy

The Contractor shall provide all facilities, severable and non-severable, necessary for the performance of the work required under this contract, except for those which may be furnished by the Government from existing sources. Costs associated with the modification, acquisition, maintenance and repair of Contractor-provided facilities shall not be a direct charge to this contract.

B. Government-furnished Facilities

1. The Contractor shall be permitted rent-free use of Government furnished facilities available under Facilities Use Contracts NOW-6406-u and NAS8-5617(F) as of the date of this contract. If any such facilities

are withdrawn from the aforementioned Facilities Use Contracts, the Contractor shall provide any replacement facilities which it considers necessary in accordance with the policy stated in A. above and any resulting schedule delay shall be deemed excusable within the meaning of the Excusable Delays clause of this contract.

2. Other necessary on-hand facilities may be made available to the Contractor during Phase III in accordance with: (i) the Contractor's request in its Phase III proposal, (ii) the terms of any applicable Government facilities contract, and (iii) the agreement of the Government agency owning such facilities. Except for any facilities owned by the Federal Aviation Agency, such facilities will be furnished on a noninterference basis, i.e., subject to recall by the Government at any time without an equitable adjustment in the contract. If it is not feasible to obtain rent-free use of these facilities, allocable rental and use charges on these facilities assessed by other Government agencies shall be considered allowable costs under this contract. Costs applicable to transportation or modification of Government-furnished facilities will be charged in accordance with the Contractor's normal accounting practice, as approved by the Contracting Officer.

3. In addition to the foregoing, all Government property supplied by the Defense Supply Agency (DSA) or Defense Industrial Plant Equipment Center (DIPEC) through the Federal Aviation Agency for work on this contract is furnished subject to the following conditions:

(a) Accountability, maintenance, protection, preservation, repair and parts replacement will be in accordance with applicable DOD Facility Contracts. Except as to any loss or damage, the risk for which is borne by the Government under the existing applicable DOD Facility Contract, such Government-furnished property will be returned to DSA in as good condition as when received, normal wear and tear excepted.

(b) Costs charged by DIPEC or DSA in connection with this property, whether or not billed directly to the Federal Aviation Agency, shall be paid by the Contractor, and the Contractor reimbursed therefor as direct costs under the terms of the contract; provided that there shall be no increase in the estimated cost or fee credit because of any such costs.

(c) The Contractor shall immediately notify the Federal Aviation Agency of all DSA and DIPEC property that will be relocated or is no longer required in the performance of work under this contract.

(d) In the event of partial mobilization, national emergency or other urgent DOD needs, as determined by the Secretary of Defense, all DSA and DIPEC property shall be returned upon notice by the Contracting Officer.

4. (The Contractor will negotiate the specific language to be incorporated into the contract delineating the Federal Aviation Agency/

Contractor relationship in regard to work to be accomplished at the Arnold Engineering Development Center. Any contract provision shall be compatible with the terms of the existing Federal Aviation Agency/Arnold Engineering Development Center Interagency Agreement.)

5. The Federal Aviation Agency shall use its best efforts to obtain approval from other Government agencies concerned for use under this contract, on a rent-free noninterference basis, of the necessary Government-owned facilities now available to subcontractors.

ARTICLE VIII. CONTRACT DATE

The effective date of this contract shall be the date on the face page specified as the "Date of Contract".

ARTICLE IX. VALUE ENGINEERING INCENTIVES - SUBCONTRACTS

Wherever appropriate, the Contractor shall include value engineering incentive clauses in subcontracts over \$100,000 that are not of the cost share type. These clauses should essentially cover the principles outlined in the Federal Aviation Agency Procurement Regulations (FAPR Notice No. 7) (Section 2-7.150-22, April 1965).

ARTICLE X. RESPONSIBILITY FOR TOTAL SST SYSTEM PERFORMANCE

A. For purposes of this Article:

1. "Total SST Systems Performance" means the integrated performance of (i) propulsion systems procured under this contract and (ii) aircraft systems procured under Contract

2. "Overall responsibility" means responsibility for undertaking any action necessary to ensure total SST system performance.

B. The Contractor hereby recognizes that as between The Boeing Company (hereafter called "aircraft contractor") and the Contractor, aircraft contractor has overall responsibility to the Government for total SST System Performance.

C. The Contractor agrees to permit reasonable observation by aircraft contractor of the Contractor's engine tests.

D. The Contractor and aircraft contractor have entered into and will retain in effect for the period of this contract a Compatibility Agreement concerning, among other matters, the allocation of allowable costs between this contract and Contract with respect to:

1. System modifications within existing requirements of this contract and Contract ; and

2. Correction of interface/matching and system deficiencies

(a) pursuant to the "Inspection and Correction of Defects" clause of this contract and Contract and, (b) to ensure total SST system performance. Any specific allocation of such costs between this contract and Contract shall be reasonable and in accordance with the terms of the Compatibility Agreement. The Contractor agrees to furnish the Contracting Officer with an informational copy of the Compatibility Agreement and all changes made thereto.

E. Except as may be provided above, the Government is not bound in any way by the terms and conditions of the Compatibility Agreement.

F. Nothing in this Article relieves the Contractor from its obligation under any of the other terms and conditions of this contract.

ARTICLE XI. SALE OF PRODUCTION AIRCRAFT AND COMPONENTS

The Aircraft and Engine Contractors will negotiate all sales of production aircraft and engines and make firm sales commitments. The sales contracts shall be negotiated at the earliest possible time. The Aircraft Contractors shall initiate negotiations of sales contracts subject to the terms of the Government-approved delivery positions. Failure of the parties to consummate firm sales contracts may result in cancellation of the affected airlines' delivery position agreements with the Government.

The Contractors shall negotiate sales in accordance with the principle that substantial prepayments from the purchasers will be obtained at the earliest possible time. Each Contractor will determine price and other terms of sale of its products. Each Contractor is authorized to negotiate prepayments, downpayments, and progress payments with its customers.

The Engine and Aircraft Contractors may negotiate spare engines and spare parts sales separately or jointly, as they desire.

ARTICLE XII. FINANCIAL PLAN FOR FUTURE PHASES OF THE SST DEVELOPMENT PROGRAM

Not later than May 31, 1968, the Contractor shall propose for Government approval a financial plan applicable to future phases of the SST Program. The Contractor may also include in this financial plan an alternate recoupment formula for recovery of the party's Phase II and III investments, provided such recoupment formula is as equally advantageous to the Government as that specified in paragraph H of Article XXI below. If the parties do not agree on such financial plan, the Government may terminate this contract or choose to allow its completion, and in either event, the Government shall refund seventy-five percent (75%) of the manufacturer's share of Phase II and III allowable costs to date less any allocable fee credit; provided neither party further develops or produces a commercial engine of the design contemplated by this contract.

ARTICLE XIII. MAXIMUM LIABILITY OF THE CONTRACTOR

The maximum liability of the Contractor under this contract for its share of allowable costs less allocable fee credit shall be \$100 million. In the event work hereunder is not completed and the Contractor declines to share costs in excess of this maximum liability, the Government may advance the necessary funds (including the Contractor's share) but the Government will recover these overrun funds in accordance with paragraph H of Article XXI hereof.

ARTICLE XIV. CATEGORY I AND CATEGORY II CHANGES

As used in this contract, a Category I change is defined as follows:

A. A change in the prototype performance requirements set forth in Exhibit "A" of the contract; or

B. A change in the production design objectives set forth in the Model and System Specifications in Exhibit "A" of the contract in any one or more of the following areas:

1. Type of Engine Cycle,
2. Weight,
3. Performance Guarantees (Airflow, Specific Fuel Consumption and Thrust) at:
 - a. Sea Level Static, or
 - b. Altitude
4. Engine Noise Levels.

All other design and engineering changes under the contract are Category II changes.

ARTICLE XV. DESIGN FLEXIBILITY

The Contractor may make design and engineering changes in either or both the prototype configuration or the production design of the engine, subject to the restrictions set forth in this Article.

The Contractor shall not make any Category I changes without the written approval of the Contracting Officer. The Contractor shall not make any Category II changes which require an increase in the estimated contract cost, an increase in the contract fee credit, or a change in the contract delivery schedule without the written approval of the Contracting Officer.

ARTICLE XVI. INCREASE IN ESTIMATED CONTRACT COST

In addition to any changes made under Article XV, the Contractor may propose to make Category II changes in its prototype engine and request an increase in estimated contract cost and fee credit therefor. The Contractor may also request any delivery schedule change that it considers necessary to accomplish any such proposed Category II change.

All such requests by the Contractor shall be supported by documentation showing why the proposed changes and increases are considered to be in the best interests of the Government and the SST Program. The supporting documentation shall show the effect on the current and subsequent phases, from a technical, operational, cost, and schedule standpoint, of each of the following:

- A. The Contractor's not making the proposed Category II change;
- B. The Contractor's making the proposed Category II change without any increase in estimated contract cost and fee credit, and change in contract delivery schedule; and
- C. The Contractor's making the proposed change with the requested increase in the contract estimated cost and fee credit, and change in contract delivery schedule.

The supporting documentation shall also include a statement by the Contractor, along with its reasons, as to whether the Contractor intends to make the Category II change if the Contracting Officer fails to agree to the Contractor's proposed increase in estimated contract cost and fee credit, and change in delivery schedule.

The Contracting Officer in his sole discretion may, but is not required to, agree with the Contractor's proposed changes and increases. Any agreement of the parties regarding these changes and increases shall be included in a written contract amendment, which shall incorporate the agreed upon changes as part of the contract work statement.

Failure of the parties to agree on any of the proposed changes or increases shall not be deemed a dispute involving a question of facts within the meaning of the contract "Disputes" clause, nor otherwise reviewable in any administrative or judicial forum.

ARTICLE XVII. MAXIMUM INCREMENTAL FUNDING REQUESTS

- A. On or before September 15, 1967, and on each annual anniversary of that date, the Contractor shall submit in writing to the Contracting Officer an estimate of the maximum aggregate allowable costs expected to be incurred by the Contractor in performance of the contract through the end of the following fiscal year (July 1 through June 30) and the following quarter (July 1 through September 30). Unless otherwise agreed to between the parties, the Contractor agrees that such estimate

of maximum costs shall be the total limit of contract funding required through such Fiscal Year, provided, however, that if the estimated cost and/or fee are changed in accordance with this contract, the Contractor shall promptly submit a revised estimate of such maximum costs and such revised estimate shall be the total limit of contract funding required through such Fiscal Year. If the Contractor fails to submit such estimate by the required date, the Contracting Officer may unilaterally make an estimate of such maximum aggregate allowable costs. In such event, the Contractor agrees that the Contracting Officer's estimate of maximum costs shall be the total limit of contract funding required through such Fiscal Year.

B. The Contractor shall promptly notify the Contracting Officer in writing if at any time the Contractor exceeds its planned expenditure rate, submitted as part of the Cost Status Report in the Data List, to a degree that indicates the amount funded will be exceeded prior to the end of the funding period. The aforementioned notice to the Contracting Officer shall contain the Contractor's adjusted planned expenditure rate for the remainder of the funding period and for the next funding period, which shall be within the estimate of the maximum aggregate allowable costs in paragraph A. above. The Contractor shall immediately implement such adjusted planned expenditure rate for the remainder of the funding period to ensure that the amount currently funded shall be adequate to continue the work through such funding period. Nothing in this paragraph shall be construed to relieve the Contractor from meeting any contract requirement.

ARTICLE XVIII. PATENT RIGHTS

A. Definitions Used in this Article

1. Subject Invention means any invention or discovery, whether or not patentable, conceived or first actually reduced to practice in the course of or under this contract. The term Subject Invention includes, but is not limited to, any art, machine, manufacture, design or composition of matter, or any new and useful improvement thereof, or any variety of plant, which is or may be patentable under the patent laws of the United States of America or any foreign country.

2. Contract means any contract, agreement, grant, or other arrangement, or subcontract entered into with or for the benefit of the Government where a purpose of the contract is the conduct of experimental, developmental or research work.

3. Subcontract and Subcontractor mean any subcontract or subcontractor of the Contractor, any lower-tier subcontract or subcontractor under this contract.

4. Background Patent means any patent, foreign or domestic, relating to aircraft turbine engines, components thereof, and methods of manufacturing such engines and components which are the product of

this contract under which the Contractor has the right to license others and which is employed in the manufacture, use, or sale of a United States SST Engine.

B. With respect to Subject Inventions (made by the Contractor), the Contractor shall promptly (and in any case within one year of conception or first actual reduction to practice) give the Contracting Officer written notice thereof and shall as soon as such information becomes available, furnish the Contracting Officer with a written disclosure sufficiently complete as to technical detail to convey to one skilled in the art to which the information pertains a clear understanding of the nature, purpose, operation and, as the case may be, physical, chemical or electrical characteristics of the Subject Invention. The Contractor will also notify the Contracting Officer within one year after submission to the Contracting Officer of the written disclosure (or such other greater time as the Contracting Officer determines to be equitable under the circumstances as requested and justified by the Contractor) as to whether a United States patent application covering the Subject Invention will be filed by or on behalf of the Contractor.

C. The Contractor further agrees that with respect to Subject Inventions (made by the Contractor) it will furnish:

1. prior to final settlement of this contract, a final report listing all such inventions or certifying that there are no such unreported inventions; and

2. information in writing, as soon as practicable, of the date and identity of any public use, sale, or publication of any such invention made by or known to the Contractor or of any contemplated publication by the Contractor; and

3. upon request, such duly executed instruments and other papers (prepared by the Government) as are deemed necessary to vest in the Government the rights granted it under this Article and to enable the Government to apply for and prosecute any patent application, in any country, covering such invention where the Government has the right under this Article to file such application; and

4. upon request, an irrevocable power of attorney to inspect and make copies of each United States patent application filed by, or on behalf of, the Contractor covering such invention.

D. 1. The Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, and royalty-free license to practice and have practiced such Subject Invention (made by the Contractor or its employees) throughout the world, including the unlimited right to sublicense others to practice and have practiced such Subject Invention throughout the world for any purpose whatsoever, royalty-free or on terms that the Government deems to be reasonable under the circumstances.

2. The Contractor further agrees that upon the written request of the Contracting Officer it will transfer and assign to the Government the title to any Subject Invention (made by the Contractor), such assignment to be subject to the reservation of an irrevocable, non-exclusive royalty-free license to the Contractor (and to its existing and future associated and affiliated companies, if any, within the corporate structure of which the Contractor is a part). Such reserved license to the Contractor shall include the right to sublicense others and shall be assignable to that part of the Contractor's business to which such Invention pertains. With respect to any Subject Invention on which the Contractor has elected to file a United States patent application, any request for title by the Contracting Officer shall be made within one year after such election by the Contractor except as provided in paragraphs H (3) and I hereof. The determination of rights to Subject Inventions hereunder shall be made in accordance with the policies set forth in Presidential Memorandum of October 10, 1963.

3. Notwithstanding anything to the contrary herein, the rights (including title) retained by or reserved or granted to the Contractor under the foregoing subparagraphs 1 and 2 of this paragraph D shall be subject to the Contractor's obligation under Article IV entitled "Consideration and Payment" of this contract to release and convey to the Government its title and rights to grant licenses and sublicenses under patents covering Subject Inventions in the event the Contractor is repaid its cost share as provided in Article IV entitled "Consideration and Payment" of this contract.

4. The Contractor also agrees, to the extent that the use of a Background Patent is, in the opinion of the Government, required in the manufacture, use, or sale of a United States SST Aircraft, to grant to others on terms which are reasonable under the circumstances, a license to use such Background Patent in the manufacture, use, or sale of a United States SST. Terms which are reasonable under the circumstances shall be established taking into consideration current royalty rates for similar patents and other pertinent circumstances including the Contractor's financial contribution of its own funds to develop the Invention which is the subject of the patent. Where the Contractor and an applicant for a license cannot agree on terms, the terms may be determined by a court of competent jurisdiction; and the Contractor shall not have the right to enjoin the use, manufacture, or sale of a Background Patent with respect to its application to supersonic aircraft.

5. Notwithstanding subparagraph 4 above, to the extent the use of a subcontractor's Background Patent is, in the opinion of the Government, required in the manufacture, use, or sale of the product developed by the subcontractor under the subcontract, to meet the needs of the Supersonic Transport Program, and provided further that the Government also determines that the subcontractor, together with others deriving rights from his patents, has not produced the product at a reasonable price in sufficient quantity, and on a level of quality to meet the needs of the SST Program, the subcontractor agrees to grant to others on terms that are reasonable under the circumstances, a license

to use such Background Patent for the production, sale, and use of the product to meet the needs of the SST Program. Where the subcontractor and an applicant for a license cannot agree on terms, the subcontractor (or those deriving rights from the subcontractor) shall not seek injunctive relief to enforce a Background Patent without (i) previously advising the General Counsel of the Federal Aviation Agency, (ii) giving Government the right to intervene in the injunction proceeding, and (iii) disclosing the commitment set out in this clause to the court from which the injunction is sought.

E. Notwithstanding any other provisions of this Patent Rights Article, the Contractor's right to grant licenses or sublicenses to others for SST use under foreign patents covering Subject Inventions shall be subject to the approval of the Administrator, and no such licenses or sublicenses shall be granted which are deemed by the Government to be undesirable from the standpoint of the United States national interest. The Contractor further agrees that its right to grant licenses or sublicenses to others for SST use under domestic patents covering Subject Inventions shall be subject to the approval of the Administrator.

F. Except as otherwise authorized in writing by the Contracting Officer, the Contractor shall obtain patent agreements to effectuate the provisions of this Article from all persons who perform any part of the work under this contract, except such clerical and manual labor personnel as will have no access to technical data.

G. 1. Except as otherwise authorized in writing by the Contracting Officer, the Contractor will insert in each cost share subcontract, having experimental, developmental, or research work as one of its purposes, provisions making this Article applicable to the subcontractor and its employees.

2. Except as otherwise authorized in writing by the Contracting Officer, the Contractor will insert in each subcontract (other than a cost share type) having experimental, developmental, or research work as one of its purposes, provisions making FAPR 2-7.450.2, "Patent Rights", (FAPR Notice No. 23, January 1966) applicable to the subcontractor and its employees.

H. In connection with each Subject Invention referred to in B. above:

1. If the Contractor has elected to file a United States patent application claiming such Invention, the Contractor shall, within six (6) months after the election, file or cause to be filed such application in due form and shall so notify the Contracting Officer at the time of such filing; if the Contractor does not file or cause to be filed such application, he shall notify the Contracting Officer within the six (6)-month period.

2. If the Contractor has elected not to file or to cause to be filed a United States patent application claiming such Invention, or

has made the contrary election but has not filed or caused to be filed such application within six (6) months after the election, the Contractor shall inform the Contracting Officer in writing, as soon as practicable, of the date and identity of any public use, sale, or publication of such Invention made by or known to the Contractor or of any contemplated publication by the Contractor and shall, upon the written request of the Contracting Officer, assign the title to such Invention to the Government subject to the reservation specified in paragraph D (2) hereof.

3. In the event the Contractor, or those other than the Government deriving rights from the Contractor, elects not to continue prosecution of any such United States patent application filed by or on behalf of the Contractor, the Contractor shall so notify the Contracting Officer not less than sixty (60) days before the expiration of the response period and, upon written request, deliver to the Contracting Officer such duly executed instruments (prepared by the Government) as are deemed necessary to assign title in the application to the Government subject to the reservation as specified in paragraph D (2) of this Article; and

4. The Contractor shall deliver to the Contracting Officer duly executed instruments fully confirmatory of all rights herein agreed to be granted or reserved to the Government.

I. The Contractor, or those other than the Government deriving rights from the Contractor, shall as between the parties hereto, have the exclusive right (subject to the rights of the Government under paragraph D of this Article to acquire title to any Subject Invention) to file applications on Subject Inventions (made by the Contractor) in each foreign country within:

1. nine (9) months from the date a corresponding United States application is filed, or nine (9) months from the date the Contractor discloses a Subject Invention under paragraph B above with an election not to file a United States application;

2. six (6) months from the date permission is granted to file foreign applications where such filing had been prohibited for security reasons; or

3. such longer period as may be approved by the Contracting Officer. The Contractor shall notify the Contracting Officer of each foreign application filed and, upon written request of the Contracting Officer, assign to the Government title in each such Subject Invention in each foreign country in which an application has not been filed within the time above specified, subject to the reservation in paragraph D (2) of this Article.

J. Nothing contained in this Patent Rights Article shall be deemed to grant any rights to either the Contractor or the Government or create

any obligations with respect to any invention other than a Subject Invention or a Background Patent.

K. The Contracting Officer or his authorized representatives shall, until the expiration of three (3) years after final payment under this contract, have the right to examine any books, records, documents, and other supporting data of the Contractor, which the Contracting Officer or his representative shall reasonably deem pertinent to the discovery or identification of Subject Inventions or to compliance by the Contractor with the requirements of this Article.

L. The Government may duplicate and disclose reports and disclosures of Subject Inventions required to be furnished by the Contractor pursuant to this Patent Rights Article.

M. Notwithstanding any of the foregoing, rights to inventions under patents and applications for patents specifically excluded under previous contracts between the parties shall be determined in accordance with the terms of the contract containing such specific exclusion, and not according to the terms of this contract; and with respect to inventions not conceived under this contract but reduced to practice hereunder the Contractor shall have the right to request, and the Administrator shall have the right to grant, waiver of the rights accruing to the Government under this Article. However, nothing in this paragraph M shall be deemed to limit or detract from the Contractor's obligation under paragraph D4 hereof to grant licenses under any such inventions which are Background Patents as defined herein.

N. Each United States patent application covering a Subject Invention filed by or on behalf of the Contractor and any patent issuing thereon shall contain a statement that the invention described and claimed therein resulted from work done under a United States Government contract, shall identify the contract, and shall state that the United States Government has an irrevocable, nonexclusive license under said application to practice and have practiced the invention claimed therein, including the unlimited right to sublicense others to practice and have practiced the claimed invention for any purposes whatsoever. The Contractor further agrees to notify the Contracting Officer of any license it grants covering a Subject Invention and to furnish the Contracting Officer with a copy of such license.

ARTICLE XIX. SECURITY REQUIREMENTS

A. The provisions of this Article shall apply to the extent that this contract involves access to information classified "Confidential" including "Confidential-Modified Handling Authorized" or higher.

B. The Government shall notify the Contractor of the security classification of this contract and the elements thereof, and of any subsequent revisions in such security classification, by the use of a Security Requirements Check List (DD Form 254), or other written notification.

C. To the extent the Government has indicated as of the date of this contract or thereafter indicates security classification under this contract as provided in paragraph B. above, the Contractor shall safeguard all classified elements of this contract and shall provide and maintain a system of security controls within its own organization in accordance with the requirements of: (i) the Security Agreement (DD Form 441), including the Department of Defense Industrial Security Manual for Safeguarding Classified Information as in effect on date of this contract, and any modification to the Security Agreement for the purpose of adapting the Manual to the Contractor's business; and (ii) any amendments to said Manual made after the date of this contract, notice of which has been furnished to the Contractor by the Security Office of the Military Department having security cognizance over the facility.

D. Representatives of the Military Department having security cognizance over the facility and representatives of the Federal Aviation Agency shall have the right to inspect at reasonable intervals the procedures, methods, and facilities utilized by the Contractor in complying with the security requirements of this contract. Should the Government, through these representatives, determine that the Contractor is not complying with the security requirements of this contract, the Contractor shall be informed in writing by the Security Office of the cognizant Military Department of the proper action to be taken in order to effect compliance with such requirements.

E. If subsequent to the date of this contract the security classifications or security requirements under this contract are changed by the Government as provided in this Article and the security costs under this contract are thereby increased or decreased, the estimated contract cost and fee credit shall be subject to an equitable adjustment by reason of such increased or decreased costs.

F. The Contractor agrees to insert, in all subcontracts hereunder which involve access to classified information, provisions which shall conform substantially to the language of this Article, including this paragraph F.

G. The Contractor also agrees that it shall determine that any subcontractor proposed by it for the furnishing of supplies and services which will involve access to classified information in the Contractor's custody has been granted an appropriate facility security clearance, which is still in effect, prior to being accorded access to such classified information.

ARTICLE XX. ADJUSTMENT FOR ABNORMAL FLUCTUATIONS IN ECONOMY

The total estimated cost of the contract does not include a factor for abnormal inflationary risk, but it does include an allowance for normal inflation as follows:

<u>Calendar Year</u>	<u>Cumulative Percentage</u>
1967	2.2
1968	4.3
1969	6.6
1970	9.1

To provide for adjustments for abnormal fluctuations in the economy, it is agreed, therefore, that the total estimated cost of this contract will be adjusted as follows:

- A. The Bureau of Labor Statistics - National Average Hourly Earnings - Aircraft Engines and Engine Parts Index for January 1967 will be used as a base.
- B. If the cumulative change in the July Index for the years 1967 through 1970 exceeds or falls below the Index for January 1967 by a percentage greater than the cumulative percentages shown in the first paragraph of this Article, an adjustment shall be made to the total estimated contract cost then set forth in Article IV (A)(1) of the contract by multiplying the difference between the percentages by seventy-five percent (75%) of the estimated cost of the work remaining to be completed. The estimated cost of the work remaining to be completed shall be determined, for this purpose, by subtracting the actual contract costs on the Contractor's books of account from the total estimated contract cost, all as of July 31 of each year. The cumulative percentages set forth in the first paragraph of this Article for the year of adjustment and all subsequent years will then be adjusted by the amount of difference between percentages established above.

ARTICLE XXI. GENERAL PROVISIONS

The General Provisions of this contract consist of the attached General Provisions entitled "Cost Reimbursement Type Contracts for Design, Research, Developmental, Test, or Experimental Work", FAA P-3 (revised 7/12/65), as modified below:

- A. The following clauses are deleted in their entirety:
Clause 2 entitled "Changes",
Clause 3 entitled "Limitation of Cost",
Clause 27 entitled "Patent Rights", and
Clause 38 entitled "Dissemination of Contract Information".

- B. Clause 1 entitled "Definitions" is revised as follows:

Paragraph (a) is deleted in its entirety and the following substituted therefor:

"(a) The term 'head of the agency' or 'Secretary' as used herein means the Administrator of the Federal Aviation Agency or the Director, Supersonic Transport Development; and the term 'his duly authorized representative' means any person, persons, or board authorized to act for the head of the agency or the Secretary."

- C. In Clause 4, "Allowable Cost, Fixed Fee and Payment", delete

paragraph (g), and all of paragraph (c) after the first sentence. In lieu of that portion of paragraph (c) deleted, substitute the following:

"Deduction of amounts cost shared by the Contractor after application of applicable credits shall be made prior to payment. In addition, the Government shall withhold one-half of one percent of the amount reimbursable to the Contractor pending completion or termination of the contract, provided that such withholding shall not exceed \$100,000."

D. Clause 9, entitled "Notice and Assistance Regarding Patent and Copyright Infringement", is revised as follows:

Add the words "against the claim being asserted." following the word "Government" at the end of paragraph (b).

E. Clause 19, entitled "Subcontracts", is revised as follows:

1. Revise paragraph (a) to read as follows:

"The Contractor shall give advance notification to the Contracting Officer of any proposed subcontract hereunder which:

(i) is cost-reimbursement type, time and materials, or labor hour and exceeds \$25,000; or

(ii) is fixed price type and exceeds in dollar amount \$100,000; or

(iii) is for research and development and exceeds \$25,000 "

2. Paragraph (b) shall be revised to read follows:

"Each proposed subcontract requiring advance notice shall be reported separately on a form which shall furnish the information requested by Exhibit "B" attached, entitled 'Advance Notice of Intent to Subcontract'. Also, the Contractor shall comply with all other requirements noted in Exhibit "B".

3. Paragraph (c) shall be revised to read as follows:

"The Contractor shall not, without the prior written consent of the Contracting Officer, place any subcontract which (i) is cost-reimbursement type, time and materials, or labor hour and exceeds \$50,000; or (ii) is fixed-price type and exceeds in dollar amount \$250,000; or (iii) is one of a number of subcontracts under this contract with a single subcontractor for the same or related supplies or services which in the aggregate are expected to exceed \$250,000; or (iv) provides for the fabrication, purchase, rental, installation, or other acquisition, of special tooling or special test equipment having value in excess of

\$10,000 or (v) has experimental, developmental or research work as one of its purposes and is in excess of \$50,000. The Contracting Officer may in his discretion, ratify in writing any such subcontract; such action shall constitute the consent of the Contracting Officer as required by this paragraph (c)."

4. Add paragraph (g) as follows:

"The Contractor shall report quarterly (the first work day of January, April, July and September) all cost sharing subcontracts executed in the previous quarter and shall furnish the information requested by Exhibit C attached, entitled 'Quarterly Report of Cost Sharing Subcontracts'."

F. Clause 21, entitled "Inspection and Correction of Defects", is revised as follows:

1. Delete paragraph (a) and substitute the following:

"To the extent practicable, the inspection concept shall be that of a standard commercial aircraft development program. Inspection audit shall be performed by the Office of Supersonic Transport Development and its designated representatives."

2. Change line 5 of paragraph (b) to read:

". . . delivered under this contract, the Contracting Officer may, if he considers it in the best interests of the Government and the SST Program require . . ."

G. Clause 26, entitled "Rights in Data-Unlimited", is revised as follows:

1. Add the following after paragraph (b)(3):

"(4) No such copyrighted matter shall be included in technical data furnished hereunder without the written consent of the copyright owner for the Government to use such copyrighted matter in the manner above described."

2. Add the following paragraph:

"(e) All data initially developed under this contract or any subcontract hereunder, but not specified for delivery, shall be retained by the Contractor or subcontractor for a period of three (3) years following final payment under this contract, and made available for this period at the request of the Government, for the cost of reproduction and handling only."

"(f) The Contracting Officer may grant deviations to the requirements of this Clause 26 insofar as subcontractor data is concerned on the basis of demonstrated need."

H. Clause 28, entitled "Recovery of Costs", is revised as follows:

"(a) The Contractor shall pay a royalty to the Government in an amount determined by the Contracting Officer, after consultation with the Contractor, to be fair, reasonable and equitable on sales (exclusive of sales to the United States Government, either directly or through Government prime contractors or subcontractors) of any JTF17A-21 engines or JTF17A-21 engine spare parts, provided that such royalty shall not exceed five percent (5%) of the selling price for the engine or part.

"(b) In selling the JTF17A-21 engine or spare part thereof identified in paragraph (a) above to the Government, either directly or indirectly through Government prime contractors or subcontractors, the Contractor shall notify the purchaser in writing that the JTF17A-21 engine or spare part thereof was developed under a Federal Aviation Agency contract containing a Recovery of Costs clause and that the purchase price of such engine or spare part thereof is less than the price of such engine or spare part thereof when sold to others than the Government by an amount no less than the Government's share under the Recovery of Costs clause. A copy of each such notice shall be sent to the Contracting Officer. The price differential accorded the Government hereunder shall be credited toward the recovery of costs anticipated by paragraph (d) below.

"(c) The Contractor shall also pay to the Government an amount equal to fifty percent (50%) of its cumulative profits on sales of JTF17A-21 engines and spare parts in excess of a ten percent (10%) profit (after deduction of all charges including payments to the Government pursuant to this clause, but before Federal income taxes) on the Contractor's costs. The Contractor may at its sole option make additional payments to the Government to accelerate the Government's recovery of its investment in the Supersonic Transport Engine Development Program.

"(d) Recovery by the Government under this clause shall be limited to the total amount expended by the Federal Aviation Agency in supporting the contractor's effort on the Supersonic Transport Engine Program. Upon recovery of such total amount with simple interest at * % per annum, the Contractor shall have no further obligation to make royalty or other payments to the Government under the SST Program and shall be released from any contractually assumed obligations to the Government in connection with the SST Program. Payments to the Government under this clause shall not be so high as to destroy the Contractor's competitive position for the sale of the JTF17A-21 engine or spare parts, provided that the JTF17A-21 engine or spare parts are otherwise reasonably priced and efficiently and economically produced.

* To be negotiated at a rate representing the average rate paid by the Government as interest on its borrowings.

"(e) The Contractor shall report to the Government all sales and receipts which might reasonably be considered to be subject to this clause; and the Contractor shall promptly render accurate certified accounts thereon to the Government at reasonable intervals."

I. Clause 32, entitled "Government Property", is revised as follows:

1. The following is added at the end of paragraph (b):

"Contractor-acquired property, cost of which is directly chargeable to this contract, shall become the property of the Government; however, ultimate title to such property and the property acquired or manufactured under Contracts FA-SS-64-2, FA-SS-65-18, or FA-SS-66-8, shall be equitably divided between the Government and the Contractor following the completion or termination of this contract in proportion to each party's contribution of allowable costs and fee credit under each of these contracts. Each of the parties (the Contractor and the Government) shall have a right of first refusal to purchase the other's interest in any of such property which one of the parties decides to sell."

2. Add to paragraph (c) the following:

"Unless otherwise permitted by the Contracting Officer in writing, compliance with the provisions of the Manual for Control of Government Property in Possession of Contractors, (Appendix B, ASPR), as in effect on the date of the contract, which Manual is hereby incorporated by reference and made a part of this contract, shall be deemed to be maintenance of a suitable inventory control system. The terms, as defined in this Manual, shall be applicable to the provisions of this contract wherein such terms are used."

3. In paragraph (f)(1), delete the section beginning "The Contractor shall not be liable . . ." and ending ". . . (including expenses incidental thereto)-" and substitute in lieu thereof the following:

"The Contractor shall not be liable for any loss of or damage to the Government Property, or for expenses incidental to such loss or damage, in excess of its proportionate equitable interest (i.e., aggregate allowable cost shared less fee credit in such property as provided for in this contract at the time of such loss or damage, except that the Contractor shall bear all risks for such loss or damage (including expenses incidental thereto))-".

4. In paragraph (f)(2), following the words "Government Property", insert the following: "or the Contractor's proportionate equitable interest in such property."

5. Add the following paragraph:

"(1) By notice in writing, the Contracting Officer may: (i) decrease any end item property furnished or to be furnished by the Government under this contract, or (ii) substitute other Government-owned end item property for property to be furnished by the Government, or to be acquired by the Contractor for use under this contract. The Contractor shall promptly take such action as the Contracting Officer may direct with respect to the removal and shipping of property covered by such notice. In the event of any decrease in or substitution of property pursuant to this paragraph, except as may be otherwise provided herein, the Contracting Officer, upon the written request of the Contractor (or, if the substitution of the property causes a decrease in the cost of performance, upon his own initiative), shall equitably adjust such contractual provisions as may be affected by the decrease or substitution. Failure of the parties to agree upon such equitable adjustment shall be considered a dispute and subject to the clause of this contract entitled 'Disputes'."

J. Clause 45, entitled "Priorities, Allocations, and Allotments", is revised as follows:

Add "The Contractor is assigned priority rating DX-A-1 for performance of the work required under this contract. It is recognized that if a significant escalation of the conflict in Vietnam or other major demands on scarce raw materials occur, the Contractor may be delayed in meeting the milestones set forth in Exhibit "A" to this contract. Accordingly, any such delays shall be deemed excusable within the meaning of the Excusable Delays clause of this contract."

EXHIBIT "A"
PHASE III WORK STATEMENT

ITEM 1.0 ENGINE AND COMPONENT DEVELOPMENT

The Contractor shall complete the prototype JTF17A-21B (hereinafter referred to as the JTF17A-21) engine Flight Test Status (FTS) test by June 30, 1969, in accordance with the requirements of Pratt & Whitney Aircraft Model Specification No. 2710 dated August 8, 1966, and shall conduct the necessary component and engine development, as detailed below, as required to achieve this goal.

1.01 Engine Design

Furnish the necessary design effort to update and improve the detailed design of the JTF17A-21, as required, on the basis of the results obtained from the testing of engines and components and continuing analytical studies. As described in the Detail Work Plan, the design effort includes, but is not limited to, the analysis, investigations, and evaluation of materials characteristics, structures, mechanics, tradeoff studies, and the preparation of detailed drawings to improve the engine design. This effort also includes the design and fabrication of engineering mockups, as required.

1.02 Fabrication and Assembly

Provide the necessary personnel and services to furnish development engines to support the JTF17A-21 program. As described in the Detail Work Plan, the effort to furnish the development engines includes the procurement and/or fabrication and assembly of approximately twelve (12) name plate engines, including refurbishment of the three Phase II-C demonstrator engines, and replacement parts to support the full-scale engine development program.

1.03 Tooling

Furnish the necessary tooling to support the fabrication, assembly, and inspection of full-scale JTF17A-21 engines. As described in the Detail Work Plan, this tooling effort includes the design, procurement and/or fabrication and inspection, as required, to develop the tooling and tooling techniques and procedures.

1.04 Engine Instrumentation

Furnish the necessary personnel and material to maintain standard and special engine instrumentation, in support of the JTF17A-21 development engine and component test program and the joint airframe/engine ground and flight test programs.

1.05 Test Equipment

Furnish the special test equipment necessary to support the JTF17A-21 development engine test program and special test equipment required by the Contractor to support the joint airframe/engine ground and flight test programs. As described in the Detail Work Plan, the special test equipment effort includes the analysis, design, procurement and/or fabrication, inspection, assembly, installation, and test, as required, to develop the special test equipment and the techniques and procedures for its utilization.

1.06 Engine Test-Ground

Provide the necessary personnel and conduct full-scale engine tests to develop the JTF17A-21 engine, complete the FTS test by June 30, 1969, and support the aircraft 100-hour flight test program. As described in the Detail Work Plan, the engine test program includes, but is not limited to, the investigation, evaluation and determination of hardware reliability, endurance capabilities, sea level and altitude performance, windmill braking, thrust reversing, stress characteristics, vibration characteristics, blade containment, ignition characteristics, and overload characteristics. The engine test program also includes the evaluation of engine design changes to utilize lower cost fuel. (Approximately 8000 hours of full-scale engine testing, including 4000 hours heated inlet, 4800 hours augmented, and 4800 hours at turbine inlet temperatures consistent with the cruise and takeoff ratings.)

1.07 Engine Performance

Provide the necessary engineering effort to analyze the overall and detail performance of the JTF17A-21 development engines at the Contractor's plant. As described in the Detail Work Plan, this engineering effort includes, but is not limited to, the investigation, evaluation and determination of overall engine performance, with respect to thrust, specific fuel consumption, augmentation, efficiency, distortion, cooling, heat rejection, starter acceleration, and windmilling characteristics at simulated sea level and altitude conditions and support of airframe studies.

1.08 Inlet System Compatibility

Furnish the effort necessary to provide technical support to the airframe manufacturer, in accordance with the Engine/Inlet Compatibility Test Plan, contained in the SST Aircraft System Responsibility Agreement dated August 5, 1966, established for Phase III between the Contractor and The Boeing Company. As described in the Detail Work Plan, the technical effort for the Engine/Inlet Compatibility Test Plan includes, but is not limited to, full-scale engine tests, fan/compressor rig tests, distortion

evaluation, engine/inlet analog dynamic interactions simulation, the analysis of engine/inlet performance, the evaluation of safety, reliability, airworthiness characteristics, and assistance in test planning.

1.09 Noise

Furnish the effort necessary to develop basic engine noise suppression techniques to support development of the JTF17A-21 engine. As described in the Detail Work Plan, this effort includes, but is not limited to, analysis, design, procurement and/or fabrication, assembly, test, and evaluation of engine noise suppression techniques which can be applied to the engine design to permit compliance with the engine noise objectives set forth in the Engine Model Specification.

1.10 Growth Potential

Perform design analytical growth potential for the JTF17A-21 engine beyond the requirements of the Engine Model Specification. As described in the Detail Work Plan, this growth effort includes, but is not limited to, the investigation, evaluation and determination of decreased specific fuel consumption, increased thrust, decreased specific weight, decreased noise levels, increased maximum flight speed capability, and increased service life capability for the JTF17A-21 engine.

1.11 Fan and Compressor

Design, procure and/or fabricate, inspect, assemble, test, and perform the analysis of fan and compressor rigs, as required, to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the fan and compressor rig test effort includes, but is not limited to, the investigation, evaluation and determination of hardware reliability, endurance capabilities, distortion tolerance, inlet compatibility, low cycle fatigue capability, surge margin, efficiency, performance, compressor inlet guide vane schedule, compressor bleed schedule, blade containment, flutter characteristics, stress characteristics, and aeroelastic characteristics. (Approximately 2200 hours fan rig testing and 2000 hours compressor rig testing.)

1.12 Primary Combustor

Design, procure and/or fabricate, inspect, assemble, test, and perform the analysis of primary combustor test rigs, as required, to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the primary combustor rig test effort includes, but is not limited to, the investigation, evaluation and determination of performance, durability, reliability, temperature distribution, ignition characteristics, altitude blowout characteristics, relight capability, and fuel

nozzle performance and endurance. (Approximately 6900 hours of primary combustor rig testing.)

1.13 Turbine

Design, procure and/or fabricate, inspect, assemble, test, and perform the analysis of turbine test rigs, as required, to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the turbine rig test effort includes, but is not limited to, the investigation, evaluation, and determination of cyclic and steady-state long time endurance capabilities, effects of adverse simulated cooling air temperatures, effects of inlet temperature profile, low cycle fatigue characteristics, verification of metal temperature, flow-pressure characteristics of the cooling circuit, cooling effectiveness, off-design characteristics, fabricating technique, and containment. In addition, the Contractor shall evaluate prime candidates for blade and vane materials, coatings, and cooling techniques with respect to long time endurance, thermal fatigue, creep, hot corrosion, and erosion. (Approximately 3200 hours of turbine rig testing.)

1.14 Augmentor

Design, procure and/or fabricate, inspect, assemble, test, and perform the analysis of full-scale and sector augmentor test rigs, as required, to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the augmentor rig test effort includes, but is not limited to, the investigation, evaluation and determination of combustion performance, ignition system operating characteristics and durability, vibration characteristics, altitude blowout and relight capability, pressure drop, and durability and functional operation of fuel injectors with hot fuel. (Approximately 3200 hours of augmentor rig testing.)

1.15 Exhaust System

Design, procure and/or fabricate, inspect, assemble, test, and perform the analysis of exhaust system test rigs, as required, to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the exhaust system rig test effort includes, but is not limited to, the investigation, evaluation and determination of static load verification, low cycle fatigue characteristics, wear characteristics, actuator stability and durability, nozzle and ejector performance, model testing, thrust reverser performance, durability, aerodynamic stability, secondary airflow effects, and primary and secondary nozzle performance. (Approximately 4600 hours of exhaust system rig testing.)

1.16 Controls and Accessories

Design, procure and/or fabricate, inspect, assemble,

test, and perform the analysis of flight weight controls, valves, actuators, lines, fittings, and accessories test rigs, as required, to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the controls, valves, actuators, lines, fittings, and accessories rig test effort includes, but is not limited to, the investigation, evaluation, and determination of hardware reliability, endurance capabilities, performance, stress characteristics, temperature effects, response characteristics, vibration characteristics, environmental capabilities, functional characteristics, inspection procedures, acceptance procedures, and/or criteria. Analysis and design coordination with the airframe manufacturer shall be continued. (Approximately 90,000 hours of controls and accessories testing.)

1.17 Lubricants, Lubrication System, Bearings, Seals, and Gears

Design, procure and/or fabricate, assemble, inspect, test, and perform the analysis of lubricant, lubrication system, bearing, seal, compartment, and gearbox test rigs, as required, to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the bearing, seal, and gear test rig effort includes, but is not limited to, the investigation, evaluation, and determination of hardware reliability, endurance capabilities, performance, oil and air temperature effects, abnormal oil pressure effects, vibration characteristics, simulated lubrication system operation, including the oil bank, cooler, supply pumps and scavenge pumps, gearbox maximum accessory load characteristics, and windmilling engine pressure simulation effects both with and without brake. In addition, for the lubricant specified in the Engine Model Specification, specific methods will be determined to evaluate and demonstrate the adequacy of the specified lubricant. (Approximately 38,000 hours of full-scale bearing compartment rig testing and 15,000 hours of full-scale gearbox rig testing.)

1.18 Fuels

Test and perform the analysis of fuels on laboratory small scale apparatus fuel rigs, as required, to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the fuel rig effort for the fuel specified in the Engine Model Specification includes, but is not limited to, the investigation, evaluation and determination of fuel quality requirements, quality control methods, and relationships between thermal stability, fuel temperature and thermal prestress, and component overhaul life. Coordination with the airframe contractor shall be continued to ensure acceptability in the airframe of the fuel specification established.

1.19 Manufacturing Techniques and Materials

Provide the necessary effort to develop and utilize

materials and fabrication techniques which will afford economical production of the JTF17A-21 engine. As described in the Detail Work Plan, this effort includes, but is not limited to, analysis, investigation, evaluation and determination of material characteristics, and fabrication techniques and procedures.

1.20 Weight Control and Status

Provide the necessary effort to implement and coordinate the JTF17A-21 engine weight control program, as required, with the Airframe Contractor's weight control program. As described in the Detail Work Plan, the weight control program effort includes, but is not limited to, tradeoff studies, analysis, correlation, design recommendations, recording and reporting, and coordination.

ITEM 2.0 MANAGEMENT CONTROLS AND PRODUCT ASSURANCE

The Contractor shall provide the services to accomplish the necessary management control and product assurance functions to support the development of the JTF17A-21 engine as detailed below.

2.01 Coordination

Coordinate with The Boeing Company (the airframe contractor) and refine the JTF17A-21 engine requirements and objectives as required, which affect the performance, operation, compatibility, reliability, safety, maintainability, and economics of the SST. Maintain coordination with the airlines so as to obtain and understand their objectives as related to SST system and engine development objectives. Conduct system analysis and tradeoff studies in conjunction with the airframe contractor and support the airframe contractor in its parallel effort. As described in the Detail Work Plan, the Contractor shall coordinate and undertake test programs resulting from these studies. The effort shall include, but not be limited to, the effort described in the SST Aircraft System Responsibility Agreement.

2.02 Maintainability and Human Engineering

Provide the necessary effort to implement effective Maintainability and Human Engineering Programs to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the maintainability and human engineering programs include, but are not limited to, establishment of design criteria, system/equipment design integration requirements, tradeoff studies, airline and FAA coordination.

2.03 Reliability

Provide the necessary effort to implement an effective Reliability Program to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the reliability

program includes, but is not limited to, tradeoff studies, failure mode and effect analysis, predictive methodology, apportionment, critical ranking, functional diagraming, redundancy analysis, design review, historical data review, training, and testing.

2.04 Quality Assurance

Provide the necessary effort to implement an effective Quality Assurance Program to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the quality assurance program effort includes, but is not limited to, the control of quality in design, development, fabrication, processing, assembling, inspection, test, and maintenance.

2.05 Value Engineering

Provide the necessary effort to implement an effective Value Engineering Program to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the value engineering program includes, but is not limited to, the establishment of tasks, schedules, and procedures, subcontractor direction, indoctrination and training, and documentation of savings.

2.06 Configuration Management

Provide the necessary effort to implement an effective Configuration Management Program to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the configuration management program effort includes, but is not limited to, the control of activities and resources to provide engine and component part identification, airframe/engine coordination, and configuration review by the FAA, airframe contractor, and the airlines.

2.07 Safety

Provide the necessary effort to implement an effective Safety Program to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the effort includes, but is not limited to, the establishment of objectives, requirements, procedures and design criteria, tradeoff studies and documentation.

2.08 Test Planning and Integration

Provide the necessary effort to implement the Integrated Test Program to support the development of the JTF17A-21 engine. As described in the Detail Work Plan, the integrated test program effort includes, but is not limited to, the establishment of program technical requirements, test facilities and schedules, and the integration of tests of the engine and components with respect to systems, structures and materials,

aerodynamics, qualification, environment, quality control, simulation, maintainability, reliability, safety, performance, and flight, as required.

2.09 Data Management

Maintain and update a Data Management Plan. As described in the Detail Work Plan, the Data Management Plan effort includes, but is not limited to, the generation, collection, storage, and dissemination of the data required to support and coordinate the development of the JTF17A-21 engine. The plan shall include a Data Requirement Document, which describes the data that will be generated in the development program, and a Data List, which will provide a current accounting of documents generated. The Contractor shall prepare and submit reports and plans in accordance with Exhibit (1), incorporated herein by attachment.

2.10 Program Management and Controls

Maintain and update the Cost and Schedule Control Plan, Subcontract Plan, Master Program Plan, Program Review Plan, and Detail Work Plan, to support the JTF17A-21 engine program.

2.11 Facilities Plan

Maintain and implement the Facilities Plan to support the JTF17A-21 engine program. As described in the Detail Work Plan, the facilities plan includes the acquisition of major new facilities, plant layout, and space allocation, planned usage of multiproject facilities, Government facility requirements, and facility schedules.

2.12 Cost Analyses

The Contractor shall update his Phase IV and Phase V Cost Baseline Estimate annually and shall also submit an annual report of funding requirements for each Fiscal Year to support the JTF17A-21 engine program.

2.13 Proposals

The Contractor shall submit definitive proposals for subsequent phases as required. The Contractor shall also prepare and submit a firm, detailed production engine specification including appropriate performance warranties. This specification shall include the then-current "production design objectives," defined in Article XIV and the preliminary model specification referenced herein, as such objectives may have been changed in accordance with Article XV of this contract. Together with this specification, the Contractor shall submit a detailed statement of such additional warranties and guarantees as the Contractor may then be willing to make.

ITEM 3.0 DELIVERY AND PRODUCT SUPPORT

The Contractor shall furnish the necessary services, as required, to fabricate and deliver JTF17A-21 engine mock-ups, ground test, and prototype (FTS) flight test engines as detailed below. The Contractor shall also provide the necessary effort, including field personnel and related services, to maintain, repair, overhaul, and test the engine and GSE in support of the selected airframe contractor ground test programs and the prototype aircraft flight test program. The planned effort in this category is described in the Detail Work Plan.

3.01 Ground and Flight Test Engines

The Contractor shall provide the engineering effort and shall fabricate and/or procure, inspect, assemble, test, and prepare for delivery ground test and prototype flight (FTS) JTF17A-21 engines to support the 100-hour flight test program as follows:

1. Experimental engines for ground test purposes will be delivered as follows:

Quantity	Delivery Date
1	October 1968
1	November 1968
1	January 1969
1	February 1969

2. Prototype JTF17A-21 engines in accordance with the Engine Model Specification No. 2710 dated August 8, 1966, will be delivered as follows:

Quantity	Delivery Date
2	July 1969
2	August 1969
2	September 1969
2	October 1969
2	November 1969
2	December 1969
2	January 1970
2	February 1970

3.02 Tooling

Furnish the necessary tooling required for the fabrication, inspection, and assembly of ground and prototype (FTS) engines.

3.03 Engine Performance

Provide the necessary engineering effort to analyze and evaluate the overall performance of the JTF17A-21 ground and prototype (FTS) engines.

3.04 Engine Mockup

Design, fabricate and/or procure, inspect, assemble, supply, and maintain JTF17A-21 engine installation mockups for the airframe manufacturer as shown in the schedule.

Quantity	Mockup Engine Class	Delivery Date
1	II	April 1967
2	II	November 1967*
1	III	January 1969
1	III	January 1969

* May be a rework of first two Class II mockups previously delivered.

3.05 Spares

Provide the necessary effort to furnish spare engine parts to support the JTF17A-21 engine during the prototype aircraft 100-hour flight test program. The Contractor shall prepare a plan for the Certification and Production Phases (IV and V). As described in the Detail Work Plan, the spare support effort includes, but is not limited to, determination of spare requirements, manufacture of spare parts, and maintenance of spare parts, logistics, inventories for line maintenance and overhaul requirements.

3.06 Overhaul

Provide the necessary effort to overhaul ground and prototype (FTS) flight test JTF17A-21 engines to support the aircraft 100-hour flight test program.

3.07 Engine Test and Evaluation - Flight

Prepare, implement, and maintain a Flight Test Plan, in conjunction with the airframe contractor, to reflect the plan and procedures for accomplishing the flight evaluation testing of the JTF17A-21 engine installed on the prototype supersonic transport. As described in the Detail Work Plan, this effort includes, but is not limited to, the support of preliminary ground operation at the airframe contractor's plant, the flight test site, or other supporting facilities, and provides the engineering effort to analyze and evaluate the engine tests, as required, to support the 100-hour aircraft flight test program. The effort includes, but is not limited to, the effort described in the SST Aircraft System Responsibility Agreement.

3.08 Data and Handbooks

Provide the necessary effort to prepare technical data required for operation, support, and maintenance of the JTF17A-21 engine and ground support equipment in the flight test program as described in the Detail Work Plan.

3.09 Training and Training Equipment

Design, procure and/or fabricate, inspect, assemble, and test, as required, the training equipment, other than engines, to support the JTF17A-21 engine during the aircraft 100-hour flight test program. As described in the Detail Work Plan, the training and training equipment plan includes training courses for the airframe manufacturer, airlines, and Pratt & Whitney Aircraft personnel and the furnishing of the necessary training equipment. The Contractor shall maintain and update the Training and Training Equipment Section of the Product Support Plan.

3.10 Ground Support Equipment

Provide the necessary effort to furnish the items for the ground handling, servicing, and maintenance support, as required, for the JTF17A-21 engine to support the prototype aircraft 100-hour flight test program.

Note: It is anticipated the test hours indicated in the work statement subsections will be accumulated; however, actual hours to be run on each rig will be determined by the Contractor based on problems which are encountered during the development program.

EXHIBIT 1 DATA LIST

The Contractor will submit the following data requirements in the schedule and quantity shown:

Item	Title	Submittal	Frequency	Copies
1	Progress Report	Mar. 1967	2 Months	20
2	Data Management Plan Update	May 1967	6 Months	2
3	Data Accession List	Mar. 1967	2 Months	5
4	Data Requirements Document Update	May 1967	6 Months	5
5	Configuration Management Plan Update	July 1967	6 Months	5
6	Model and Performance Specifications, Preliminary Firm	July 1967 Prior to Phase III Completion	6 Months	5 5
7	Engineering Change Proposal	As Required		20
8	Configuration Inspection and Review Plan	July 1967	6 Months	5
9	Cost Status Report	Feb. 1967	Monthly	2
10	Schedule Status Report	Feb. 1967	Monthly	2
11	Detail Work Plan Update	Feb. 1967	Update as Required	10
12	Cost Baseline Report	Sept. 1967	Annual	5
13	Cost Control System Update	Feb. 1967	Update as Required	2
14	Schedule Control System Update	Feb. 1967	Update as Required	2
15	Control Room Data	As Required		
16	Subcontract Plan Update	Apr. 1967	Update as Required	5
17	Value Engineering Program Update	June 1967	6 Months	2
18	Annual Report	Jan. 1966	Annual	20
19	Final Report	Phase III Conclusion		20
20	Data Central File	Mar. 1967	2 Months	1

Item	Title	Submittal	Frequency	Copies
21	Maintainability Program Update	Aug. 1967	6 Months	2
22	Airline Maintenance Plan	Dec. 1969		5
23	Systems Safety Plan Update	June 1967	6 Months	5
24	Product Support Program Including Training and Training Equipment Update	July 1967	6 Months	2
25	Reliability Program Update	July 1967	6 Months	2
26	Quality Assurance Program Update	Aug. 1967	6 Months	2
27	Integrated Test Program Update	Aug. 1967	Monthly	20
28	Facilities Plan Update	July 1967	As Required	2
29	Master Program Plan Update	June 1967	6 Months	20
30	High Risk Area Report	Feb. 1967	2 Months	10
31	Human Engineering Program Update	June 1967	6 Months	2
32	Follow-on Proposal	Prior to Phase III Completion		30
33	Flash Failure Report	As Generated		1
34	Subcontractor Acceptance/Qualification Test Report	As Generated		5
35	Engine FTS Test Plan	6 Months Prior to Start of Test		5
36	Final FTS Test Report	30 Days After Completion		5
37	Final Report of Inlet/Engine Compatibility Testing	90 Days After Completion		5
38	Final Report of Government Facility Testing	30 Days After Receipt of Data from Government Facility		5
39	Final Report of 100-hour Flight Test	30 Days After Completion		20
40	Phases III and IV Detailed Test Plans	July 1967	6 Months	5
41	Engine Status and Usage Records	Feb. 1967	Monthly	5
42	Failure and Analysis Report	As Generated		5

Item	Title	Submittal	Frequency	Copies
43	Engine Installation Manual	July 1967	6 Months	5
44	Engine Flight Test Report	As Generated		
45	Manufacturing Program Update	July 1967	6 Months	5

EXHIBIT "B"
ADVANCE NOTICE OF INTENT TO SUBCONTRACT

1. Description of Proposed Procurement.
2. Proposed Subcontractor or List of Firms to be Solicited.
3. Type of Proposed Subcontract - e.g., FFP, IFP, CPFF, CPIF, Cost-share, etc.
4. Price or Estimated Cost-Plus-Fixed-Fee (Actual or Approximate).
5. Delivery Schedule (Actual or Approximate).
6. Explain any special or unusual features.
7. Estimated date subcontract will be executed.
8. Statement of work element under which the proposed subcontract is to be executed.

NOTE

- a. Advance notice generally will be submitted at the time request is made for proposals from prospective subcontractors, but shall be mailed by the Contractor at least ten (10) days prior to the contemplated award date.
- b. In the event of critical need to proceed, telegraph or telephone notification will be accepted.
- c. Advance notice of proposed subcontracts is for information only and will not constitute a request for approval.
- d. Advance Notice of Intent to Subcontract shall be submitted in triplicate to the Federal Aviation Agency Contracting Officer, Attention: SS-39, with a copy to the Resident DOD Representative.

EXHIBIT "C"
QUARTERLY REPORT OF COST SHARING SUBCONTRACTS

1. Description of the equipment or services and what will be delivered under the subcontract, e.g., hardware, test reports, data.
2. Subcontractor.
3. Type of subcontract.
4. Total amount of subcontract
5. What is the sharing arrangement?
6. What other bids were received for this subcontract, in what amounts and did they propose a cost share? What did you estimate it would cost?
7. Does the subcontract contain any option provisions?
8. If the cost of engineering and tooling is over thirty percent (30%), what are the amounts of these elements?
9. Have all the contractual provisions and performance requirements of the prime contract been passed on to the subcontractor? If not, explain.

FEDERAL AVIATION AGENCY

Washington, D.C. 20553

GENERAL PROVISIONS

COST-REIMBURSEMENT TYPE CONTRACTS FOR
DESIGN, RESEARCH, DEVELOPMENTAL, TEST OR EXPERIMENTAL WORK

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1. DEFINITIONS

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

(a) The term "head of the agency" or "Secretary" as used herein means the Secretary, the Under Secretary, any Assistant Secretary, or any other head or assistant head of the executive or military department or other Federal 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 head of the agency or 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.

(c) Except as otherwise provided in this contract, the term "subcontracts" includes purchase orders under this contract.

2. CHANGES

The Contracting Officer may at any time, by a written order, and without notice to the sureties, if any, make changes, within the general scope of this contract, in any one or more of the following: (i) drawings, designs, or specifications, (ii) method of shipment or packing; (iii) place of inspection, delivery, or acceptance, and (iv) the amount of Government-furnished property. If any such changes cause an increase or decrease in the estimated cost of, or the time required for, performance of this contract, or otherwise affects any other provisions of this contract, whether changed or not changed by any such order, an equitable adjustment shall be made (i) in the estimated cost or delivery schedule, or both, (ii) in the amount of any fee to be paid to the Contractor, and/or (iii) in such other provisions of the contract as may be so affected, and the contract shall be modified in writing accordingly. Any claim by the Contractor for adjustment under this clause must be asserted within 30 days from the date of receipt by the Contractor of the notification of change: *Provided, however,* That the Contracting Officer, if he decides that the facts justify such action, may receive and act upon any such claim asserted at any time prior to final payment under this contract. Failure to agree to any adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes." However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

3. LIMITATION OF COST

(a) It is estimated that the total cost to the Government, exclusive of any fixed fee, for the performance of this contract will not exceed the estimated cost set forth in the Schedule, and the Contractor agrees to use its best efforts to perform the work specified in the Schedule, and all obligations under this contract within such estimated cost. If at any time the Contractor has reason to believe that the costs which it expects to incur in the performance of this contract in the next succeeding 60 days, when added to costs previously incurred, will exceed 75% of the estimated cost then set forth in the Schedule, or if at any time, the Contractor has reason to believe that the

total cost to the Government, exclusive of any fixed fee, for the performance of this contract will be substantially greater or less than the then estimated cost thereof, the Contractor shall immediately notify the Contracting Officer in writing to that effect, giving the revised estimate of such total cost for the performance of this contract.

(b) The Government shall not be obligated to reimburse the Contractor for costs incurred in excess of the estimated cost set forth in the Schedule, and the Contractor shall not be obligated to continue performance under the contract or to incur costs in excess of the estimated cost set forth in the Schedule, unless and until the Contracting Officer shall have notified the Contractor in writing that such estimated cost has been increased and shall have specified in such notice a revised estimated cost, which shall thereupon constitute the estimated cost of performance of this contract. When and to the extent that the estimated cost set forth in the Schedule has been increased, any costs incurred by the Contractor in excess of such estimated cost prior to the increase in estimated cost shall be allowable to the same extent as if such costs had been incurred after such increase in estimated cost.

(c) If, (i) the Contractor stops performance before completion of all work hereunder because it has incurred costs in the amount of or in excess of the estimated contract cost set forth in the Schedule, and (ii) the Contracting Officer elects not to increase such estimated cost, the Contractor's fixed fee will be equitably reduced to reflect the actual amount of work performed as compared with the full amount of work required in the contract. In the event of failure to agree as to the amount of such reduction, the Contracting Officer shall determine the amount, subject to the right of the Contractor to appeal therefrom pursuant to the clause in the contract entitled "Disputes." This paragraph shall not, in any way, limit the rights of the Government under the clause in the contract entitled "Termination for Default or for Convenience of the Government."

4. ALLOWABLE COST, FIXED FEE AND PAYMENT

(a) For the performance of this contract, the Government shall pay to the Contractor:

(1) The cost thereof (hereinafter referred to as "allowable cost") determined by the Contracting Officer to be allowable in accordance with—

(i) Subpart 1-15.2 of Part 1-15 of the Federal Procurement Regulations as in effect on the date of this contract; and

(ii) the terms of this contract; and

(2) Such fixed fee, if any, as may be provided for in the Schedule.

(b) Once each month (or at more frequent intervals, if approved by the Contracting Officer) the Contractor may submit to an authorized representative of the Contracting Officer, in such form and reasonable detail as such representative may require, an invoice or public voucher supported by a statement of cost incurred by the Contractor in the performance of this contract claimed to constitute allowable cost.

(c) Promptly after receipt of such invoice or voucher and statement of cost the Government shall, except as otherwise provided in this contract, subject to the provisions of (d) below, make payment thereon as approved by the Contracting Officer of allowable cost incurred. Payment

of the fixed fee, if any, shall be made to the Contractor as specified in the Schedule: *Provided, however, That* after payment of 85% of the fixed fee set forth in the Schedule, further payment on account of the fixed fee shall be withheld until a reserve of either 15% of the total fixed fee, or \$100,000, whichever is less, shall have been set aside.

(d) At any time or times prior to final payment under this contract the Contracting Officer may have the invoices or vouchers and statements of cost audited. Each payment theretofore made shall be subject to reduction for amounts included in the related invoice or voucher which are found by the Contracting Officer on the basis of such audit, not to constitute allowable cost. Any payment may be reduced for overpayments, or increased for underpayments on preceding invoices or vouchers.

(e) On receipt and approval of the invoice or voucher designated by the Contractor as the "completion invoice" or "completion voucher" and upon compliance by the Contractor with all the provisions of this contract (including, without limitation, the provisions relating to patents and the provisions of (f) below), the Government shall promptly pay to the Contractor any balance of allowable cost, and any part of the fixed fee which has been withheld pursuant to (c) above or otherwise not paid to the Contractor. The completion invoice or voucher shall be submitted by the Contractor promptly following completion of the work under this contract but in no event later than one year (or such longer period as the Contracting Officer may in his discretion approve in writing) from the date of such completion.

(f) The Contractor agrees that any refunds, rebates, credits, or other amounts (including any interest thereon) accruing to or received by the Contractor or any assignee under this contract shall be paid by the Contractor to the Government, to the extent that they are properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract. Reasonable expenses incurred by the Contractor for the purpose of securing such refunds, rebates, credits, or other amounts shall be allowable costs hereunder when approved by the Contracting Officer. Prior to final payment under this contract, the Contractor and each assignee under this contract whose assignment is in effect at the time of final payment under this contract shall execute and deliver:

(1) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including any interest thereon) properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and

(2) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, subject only to the following exceptions—

(i) Specified claims in stated amounts or in estimated amounts where the amounts are not susceptible of exact statement by the Contractor;

(ii) Claims, together with reasonable expenses incidental thereto, based upon liabilities of the Contractor to third parties arising out of the performance of this contract: *Provided, That* such claims are not known to the Contractor on the date of the execution of the release; *And Provided further, That* the Contractor gives notice of such

claims in writing to the Contracting Officer not more than six years after the date of the release or the date of any notice to the Contractor that the Government is prepared to make final payment, whichever is earlier; and

(iii) Claims for reimbursement of costs (other than expenses of the Contractor by reason of its indemnification of the Government against patent liability), including reasonable expenses incidental thereto, incurred by the Contractor under the provisions of this contract relating to patents.

(g) Any cost incurred by the Contractor under the terms of this contract which would constitute allowable cost under the provisions of this clause shall be included in determining the amount payable under this contract, notwithstanding any provisions contained in the specifications or other documents incorporated in this contract by reference, designating services to be performed or materials to be furnished by the Contractor at his expense or without cost to the Government.

5. ASSIGNMENT OF CLAIMS

(a) Pursuant to the provisions of the Assignment of Claims Act of 1940, as amended (31 U.S.C. 203, 41 U.S.C. 15), if this contract provides for payments aggregating \$1,000 or more, claims for moneys due or to become due the Contractor from the Government under this contract may be assigned to a bank, trust company, or other financing institution, including any Federal lending agency, and may thereafter be further assigned and reassigned to any such institution. Any such assignment or reassignment shall cover all amounts payable under this contract and not already paid, and shall not be made to more than one party, except that any such assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in such financing. Unless otherwise provided in this contract, payments to an assignee of any moneys due or to become due under this contract shall not, to the extent provided in said Act, as amended, be subject to reduction or setoff.

(b) In no event shall copies of this contract or of any plans, specifications, or other similar documents relating to work under this contract, if marked "Top Secret," "Secret," or "Confidential," be furnished to any assignee of any claim arising under this contract or to any other person not entitled to receive the same. However, a copy of any part or all of this contract so marked may be furnished, or any information contained therein may be disclosed, to such assignee upon the prior written authorization of the Contracting Officer.

6. EXAMINATION OF RECORDS

(a)(1) The Contractor agrees to maintain books, records, documents, and other evidence pertaining to the costs and expenses of this contract (hereinafter collectively called the "records") to the extent and in such detail as will properly reflect all net costs, direct and indirect, of labor, materials, equipment, supplies and services, and other costs and expenses of whatever nature for which reimbursement is claimed under the provisions of this contract.

(2) The Contractor agrees to make available at the office of the Contractor at all reasonable times during the period set forth in subparagraph (4) below any of the records for inspection, audit or reproduction by any authorized representative of the Comptroller General.

(3) In the event that the Comptroller General or any of his duly authorized representatives determines that his audit of the amounts reimbursed under this contract as transportation charges will be made at a place other than the office of the Contractor, the Contractor agrees to deliver, with the reimbursement voucher covering such charges or as may be otherwise specified within two years after reimbursement of charges covered by any such voucher, to such representative as may be designated for that purpose through the Contracting Officer such documentary evidence in support of transportation costs as may be required by the Comptroller General or any of his duly authorized representatives.

(4) Except for documentary evidence delivered to the Government pursuant to subparagraph (3) above, the Contractor shall preserve and make available his records (i) for a period of three years from the date of final payment under this contract, and (ii) for such longer period, if any, as is required by applicable statute, by any other clause of this contract, or by (A) or (B) below.

(A) If this contract is completely or partially terminated, the records relating to the work terminated shall be preserved and made available for a period of three years from the date of any resulting final settlement.

(B) Records which relate to (i) appeals under the Disputes clause of this contract, (ii) litigation or the settlement of claims arising out of the performance of this contract, or (iii) cost and expenses of this contract as to which exception has been taken by the Comptroller General or any of his duly authorized representatives, shall be retained by the Contractor until such appeals, litigation, claims, or exceptions have been disposed of.

(5) Except for documentary evidence delivered pursuant to subparagraph (3) above, and the records described in subparagraph (4) (B) above, the Contractor may in fulfillment of his obligation to retain his records as required by this clause substitute photographs, microphotographs, or other authentic reproductions of such records, after the expiration of two years following the last day of the month of reimbursement to the Contractor of the invoice or voucher to which such records relate, unless a shorter period is authorized by the Contracting Officer with the concurrence of the Comptroller General or his duly authorized representative.

(6) The provisions of this paragraph (a), including this subparagraph (6), shall be applicable to and included in each subcontract hereunder which is on a cost, cost-plus-a-fixed-fee, time-and-material or labor-hour basis.

(b) The Contractor further agrees to include in each of his subcontracts hereunder, other than those set forth in subparagraph (a)(6) above, a provision to the effect that the subcontractor agrees that the Comptroller General or any of his duly authorized representatives, shall, until the expiration of three years after final payment under the subcontract, have access to and the right to examine any directly pertinent books, documents, papers, and records of such subcontractor, involving transactions related to the subcontract. The term "subcontract", as used in this paragraph (b) only, excludes (i) purchase orders not exceeding \$2,500 and (ii) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public.

7. TERMINATION FOR DEFAULT OR FOR CONVENIENCE OF THE GOVERNMENT

(a) The performance of work under the contract may be terminated by the Government in accordance with this clause in whole, or from time to time in part:

(1) Whenever the Contractor shall default in performance of this contract in accordance with its terms (including in the term "default" any such failure by the Contractor to make progress in the prosecution of the work hereunder as endangers such performance), and shall fail to cure such default within a period of ten days (or such longer period as the Contracting Officer may allow) after receipt from the Contracting Officer of a notice specifying the default; or

(2) Whenever for any reason the Contracting Officer shall determine that such termination is in the best interest of the Government.

Any such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying whether termination is for the default of the Contractor or for the convenience of the Government, the extent to which performance of work under the contract is terminated, and the date upon which such termination becomes effective. If, after notice of termination of this contract for default under (1) above, it is determined for any reason that the Contractor was not in default pursuant to (1), or that the Contractor's failure to perform or to make progress in performance is due to causes beyond the control and without the fault or negligence of the Contractor pursuant to the provisions of the clause of this contract relating to excusable delays, the Notice of Termination shall be deemed to have been issued under (2) above, and the rights and obligations of the parties hereto shall in such event be governed accordingly.

(b) After receipt of a Notice of Termination and except as otherwise directed by the Contracting Officer, the Contractor shall:

(1) Stop work under the contract on the date and to the extent specified in the Notice of Termination;

(2) Place no further orders or subcontracts for materials, services, or facilities, except as may be necessary for completion of such portion of the work under the contract as is not terminated;

(3) Terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the Notice of Termination;

(4) Assign to the Government, in the manner and to the extent directed by the Contracting Officer, all of the right, title, and interest of the Contractor under the orders or subcontracts so terminated, in which case the Government shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;

(5) With the approval or ratification of the Contracting Officer, to the extent he may require, which approval or ratification shall be final and conclusive for all purposes of this clause, settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, the cost of which would be reimbursable in whole or in part, in accordance with the provisions of this contract;

(6) Transfer title to the Government (to the extent that title has not already been transferred) and deliver in the

manner, at the times, and to the extent directed by the Contracting Officer, (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced as a part of, or acquired in respect of the performance of, the work terminated by the Notice of Termination; (ii) the completed or partially completed plans, drawings, information, and other property which, if the contract had been completed, would be required to be furnished to the Government; and (iii) the jigs, dies, and fixtures, and other special tools and tooling acquired or manufactured for the performance of this contract for the cost of which the Contractor has been or will be reimbursed under this contract;

(7) Use his best efforts to sell, in the manner, at the times, to the extent, and at the price or prices directed or authorized by the Contracting Officer, any property of the types referred to in (6) above: *Provided, however*, That the Contractor (i) shall not be required to extend credit to any purchaser, and (ii) may acquire any such property under the conditions prescribed by and at a price or prices approved by the Contracting Officer: *And provided further*, That the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the Government to the Contractor under this contract or shall otherwise be credited to the price or cost of the work covered by this contract or paid in such other manner as the Contracting Officer may direct;

(8) Complete performance of such part of the work as shall not have been terminated by the Notice of Termination; and

(9) Take such action as may be necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to this contract which is in the possession of the Contractor and in which the Government has or may acquire an interest. The Contractor shall proceed immediately with the performance of the above obligations notwithstanding any delay in determining or adjusting the amount of the fee, or any item of reimbursable cost, under this clause. At any time after expiration of the plant clearance period, as defined in Subpart 1-8.1 of the Federal Procurement Regulations (41 CFR 1-8.1), as the definition may be amended from time to time, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by the Contracting Officer, and may request the Government to remove such items or enter into a storage agreement covering them. Not later than 15 days thereafter, the Government will accept such items and remove them or enter into a storage agreement covering the same: *Provided*, That the list submitted shall be subject to verification by the Contracting Officer upon removal of the items or, if the items are stored, within 45 days from the date of submission of the list, and any necessary adjustment to correct the list as submitted shall be made prior to final settlement.

(c) After receipt of a Notice of Termination, the Contractor shall submit to the Contracting Officer his termination claim in the form and with the certification prescribed by the Contracting Officer. Such claim shall be submitted promptly but in no event later than one year from the effective date of termination, unless one or more extensions in writing are granted by the Contracting Officer upon re-

quest of the Contractor made in writing within such one-year period or authorized extension thereof. However, if the Contracting Officer determines that the facts justify such action, he may receive and act upon any such termination claim at any time after such one-year period or any extension thereof. Upon failure of the Contractor to submit his termination claim within the time allowed, the Contracting Officer may, subject to any review required by the contracting agency's procedures in effect as of the date of execution of this contract, determine, on the basis of information available to him, the amount, if any, due to the Contractor by reason of the termination and shall thereupon pay to the Contractor the amount so determined.

(d) Subject to the provisions of paragraph (c), and subject to any review required by the contracting agency's procedures in effect as of the date of execution of this contract, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount or amounts to be paid (including an allowance for the fee) to the Contractor by reason of the total or partial termination of work pursuant to this clause. The contract shall be amended accordingly, and the Contractor shall be paid the agreed amount.

(e) In the event of the failure of the Contractor and the Contracting Officer to agree in whole or in part, as provided in paragraph (d), as to the amounts with respect to costs and fee, or as to the amount of the fee, to be paid to the Contractor in connection with the termination of work pursuant to this clause, the Contracting Officer shall, subject to any review required by the contracting agency's procedures in effect as of the date of execution of this contract, determine, on the basis of information available to him, the amount, if any, due to the Contractor by reason of the termination and shall pay to the Contractor the amount determined as follows:

(1) If the settlement includes cost and fee—

(i) There shall be included therein all costs and expenses reimbursable in accordance with this contract, not previously paid to the Contractor for the performance of this contract prior to the effective date of the Notice of Termination, and such of these costs as may continue for a reasonable time thereafter with the approval of or as directed by the Contracting Officer: *Provided, however*, That the Contractor shall proceed as rapidly as practicable to discontinue such costs;

(ii) There shall be included therein so far as not included under (i) above, the cost of settling and paying claims arising out of the termination of work under subcontracts or orders, as provided in paragraph (b) (5) above, which are properly chargeable to the terminated portion of the contract;

(iii) There shall be included therein the reasonable costs of settlement, including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the contract and for the termination and settlement of subcontracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of termination inventory: *Provided, however*, That if the termination is for default of the Contractor there shall not be included any amounts for the preparation of the Contractor's settlement proposal; and

(iv) There shall be included therein a portion of the fee payable under the contract determined as follows—

(A) In the event of the termination of this contract for the convenience of the Government and not for the default of the Contractor, there shall be paid a percentage of the fee equivalent to the percentage of the completion of work contemplated by the contract, less fee payments previously made hereunder; or

(a) In the event of the termination of this contract for the default of the Contractor, the total fee payable shall be such proportionate part of the fee (or, if this contract calls for articles of different types, of such part of the fee as is reasonably allocable to the type of article under consideration) as the total number of articles delivered to and accepted by the Government bears to the total number of articles of a like kind called for by this contract. If the amount determined under this subparagraph (1) is less than the total payment theretofore made to the Contractor, the Contractor shall repay to the Government the excess amount.

(2) If the settlement includes only the fee, the amount thereof will be determined in accordance with subparagraph (1)(iv) above.

(B) The Contractor shall have the right of appeal, under the clause of this contract entitled "Disputes", from any determination made by the Contracting Officer under paragraph (c) or (e) above, except that, if the Contractor has failed to submit his claim within the time provided in paragraph (c) above and has failed to request extension of such time, he shall have no such right of appeal. In any case where the Contracting Officer has made a determination of the amount due under paragraph (c) or (e) above, the Government shall pay to the Contractor the following:

(1) If there is no right of appeal hereunder or if no timely appeal has been taken, the amount so determined by the Contracting Officer, or (2) if an appeal has been taken, the amount finally determined on such appeal.

(C) In arriving at the amount due the Contractor under this clause there shall be deducted (1) all unliquidated advance or other payments theretofore made to the Contractor, applicable to the terminated portion of this contract, (2) any claim which the Government may have against the Contractor in connection with this contract, and (3) the agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the Contractor or sold pursuant to the provisions of this clause and not otherwise recovered by or credited to the Government.

(D) In the event of a partial termination, the portion of the fee which is payable with respect to the work under the continued portion of the contract shall be equitably adjusted by agreement between the Contractor and the Contracting Officer, and such adjustment shall be evidenced by an amendment to this contract.

(E) The Government may from time to time, under such terms and conditions as it may prescribe, make partial payments and payments on account against costs incurred by the Contractor in connection with the terminated portion of the contract whenever in the opinion of the Contracting Officer the aggregate of such payments shall be within the amount to which the Contractor will be entitled hereunder. If the total of such payments is in excess of the amount

finally determined to be due under this clause, such excess shall be payable by the Contractor to the Government upon demand, together with interest computed at the rate of six percent per annum, for the period from the date such excess payment is received by the Contractor to the date on which such excess is repaid to the Government: *Provided, however,* That no interest shall be charged with respect to any such excess payment attributable to a reduction in the Contractor's claim by reason of retention or other disposition of termination inventory until ten days after the date of such retention or disposition, or such later date as determined by the Contracting Officer by reason of the circumstances.

(F) The provisions of this clause relating to the fee shall be inapplicable if this contract does not provide for payment of a fee.

8. DISPUTES

(a) 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. The decision of the Contracting Officer shall be final and conclusive unless within 30 days from the date of receipt of such copy, the Contractor mails or otherwise furnishes to the Contracting Officer a written appeal addressed to the Secretary. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. 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.

(b) This "Disputes" clause does not preclude consideration of law questions in connection with decisions provided for in paragraph (a) above: *Provided,* That nothing in this contract shall be construed as making final the decision of any administrative official, representative, or board on a question of law.

9. NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT

(The provisions of this clause shall be applicable only if the amount of this contract exceeds \$10,000.)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed hereunder, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor

pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

10. BUY AMERICAN ACT

(a) In acquiring end products, the Buy American Act (41 U.S. Code 10a-d) provides that the Government give preference to domestic source end products. For the purpose of this clause:

(i) "Components" means those articles, materials, and supplies which are directly incorporated in the end products;

(ii) "End products" means those articles, materials, and supplies which are to be acquired under this contract for public use; and

(iii) A "domestic source end product" means (A) an unmanufactured end product which has been mined or produced in the United States and (B) an end product manufactured in the United States if the cost of the components thereof which are mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. For the purposes of this (a)(iii)(B), components of foreign origin of the same type or kind as the products referred to in (b)(ii), or (iii) of this clause shall be treated as components mined, produced, or manufactured in the United States.

(b) The Contractor agrees that there will be delivered under this contract only domestic source end products, except end products:

(i) Which are for use outside the United States;

(ii) Which the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality;

(iii) As to which the Secretary determines the domestic preference to be inconsistent with the public interest; or

(iv) As to which the Secretary determines the cost to the Government to be unreasonable.

(The foregoing requirements are administered in accordance with Executive Order No. 10582, dated December 17, 1954.)

11. 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.

12. CONTRACT WORK HOURS STANDARDS ACT—OVERTIME COMPENSATION

This contract, to the extent that it is of a character specified in the Contract Work Hours Standards Act (40 U.S.C. 327-330), is subject to the following provisions and to all other applicable provisions and exceptions of such Act and the regulations of the Secretary of Labor thereunder.

(a) *Overtime requirements.* No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of eight hours in any calendar day or in excess of forty hours in such workweek on work subject to the provisions of the Contract Work Hours Standards Act unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all such hours worked in excess of eight hours in any calendar day or in

excess of forty hours in such workweek, whichever is the greater number of overtime hours.

(b) *Violation; liability for unpaid wages; liquidated damages.* In the event of any violation of the provisions of paragraph (a), the Contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the provisions of paragraph (a) in the sum of \$10 for each calendar day on which such employee was required or permitted to be employed on such work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by paragraph (a).

(c) *Withholding for unpaid wages and liquidated damages.* The Contracting Officer may withhold from the Government Prime Contractor, from any moneys payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions of paragraph (b).

(d) *Subcontracts.* The Contractor shall insert paragraphs (a) through (d) of this clause in all subcontracts, and shall require their inclusion in all subcontracts of any tier.

(e) *Payrolls and payroll records.* The Contractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name and address of each such employee, his correct classification, rate of pay, daily and weekly number of hours worked, deductions made and actual wages paid. The Contractor shall make his employment records available for inspection by authorized representatives of the Contracting Officer and the Department of Labor, and shall permit such representatives to interview employees during working hours on the job.

13. WALSH-HEALEY PUBLIC CONTRACTS ACT

If this contract is for the manufacture or furnishing of materials, supplies, articles, or equipment in an amount which exceeds or may exceed \$10,000 and is otherwise subject to the Walsh-Healey Public Contracts Act, as amended (41 U.S. Code 35-45), there are hereby incorporated by reference all representations and stipulations required by said Act and regulations issued thereunder by the Secretary of Labor, such representations and stipulations being subject to all applicable rulings and interpretations of the Secretary of Labor which are now or may hereafter be in effect.

14. EQUAL OPPORTUNITY

(The following clause is applicable unless this contract is exempt under the rules and regulations of the President's Committee on Equal Employment Opportunity (41 CFR, Chapter 60). Exemptions include contracts and subcontracts (i) not exceeding \$10,000, (ii) not exceeding \$100,000 for standard commercial supplies or raw materials, and (iii) under which work is performed outside the United States and no recruitment of workers within the United States is involved.)

During the performance of this contract, the Contractor agrees as follows:

(a) The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action 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, in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.

(b) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

(c) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency Contracting Officer, advising the said labor union or workers' representative of the Contractor's commitments under this nondiscrimination clause, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(d) The Contractor will comply with all provisions of Executive Order No. 10925 of March 6, 1961, as amended, and of the rules, regulations, and relevant orders of the President's Committee on Equal Employment Opportunity created thereby.

(e) The Contractor will furnish all information and reports required by Executive Order No. 10925 of March 6, 1961, as amended, and by the rules, regulations, and orders of the said Committee, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Committee for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(f) In the event of the Contractor's noncompliance with the nondiscrimination clause of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 10925 of March 6, 1961, as amended, and such other sanctions may be imposed and remedies invoked as provided in the said Executive Order or by rule, regulation, or order of the President's Committee on Equal Employment Opportunity, or as otherwise provided by law.

(g) The Contractor will include the provisions of paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the President's Committee on Equal Employment Opportunity issued pursuant to section 308 of Executive Order No. 10925 of March 6, 1961, as amended, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for non-

compliance. *Provided, however,* That in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

**Unless otherwise provided, the Equal Opportunity Clause is not required to be inserted in subcontracts below the second tier except for subcontracts involving the performance of "construction work" at the "site of construction" (as those terms are defined in the Committee's rules and regulations) in which case the clause must be inserted in all such subcontracts. Subcontracts may incorporate by reference the Equal Opportunity clause.*

13. 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.

14. 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, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

17. UTILIZATION OF SMALL BUSINESS CONCERNS

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

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

(If the contract amount exceeds \$500,000.00 the following clause is applicable)

Small Business Subcontracting Program:

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

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

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

(3) Assure that small business concerns will have an equitable opportunity to compete for subcontracts, particu-

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

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

(A) Whether the award went to large or small business.

(B) Whether less than three or more than two small business concerns were solicited.

(C) The reason for non-solicitation of small business if such was the case.

(D) The reason for small business failure to receive the award if such was the case when small business was solicited.

The records maintained in accordance with (4) above may be in such form as the Contractor may determine, and the information shall be summarized quarterly and submitted by the purchasing department of each individual plant or division to the Contractor's cognizant small business liaison officer. Such quarterly summaries will be considered to be management records only and need not be submitted routinely to the Government; however, records maintained pursuant to this clause will be kept available for review.

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

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

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

(8) Submit such information on subcontracting to small business concerns as is called for by the Contracting Officer.

(b) A "small business concern" is a concern that meets the pertinent criteria established by the Small Business Administration and set forth in Paragraph 1-1.701 of the Federal Procurement Regulations.

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

(d) The Contractor further agrees to insert, in any subcontract hereunder which may exceed \$500,000 and which contains the Utilization of Small Business Concerns clause, provisions which shall conform substantially to the language of this clause, including this paragraph (d), and to notify the Contracting Officer of the names of such subcontractors.

18. UTILIZATION OF CONCERNS IN LABOR SURPLUS AREAS

It is the policy of the Government to place contracts with concerns which will perform such contracts substantially in areas of persistent or substantial labor surplus where this can be done consistent with the efficient performance of the contract and at prices no higher than are obtainable elsewhere. The Contractor agrees to use his best efforts to place his subcontracts in accordance with this policy. In complying with the foregoing and with paragraph (b) of the clause of this contract entitled "Utilization of Small Business Concerns," the Contractor in placing his subcontracts shall observe the following order of preference: (a) persistent labor surplus area concerns which are also small business concerns; (b) other persistent labor surplus area concerns; (c) substantial labor surplus area concerns which are also small business concerns; (d) other substantial labor surplus area concerns; and (e) small business concerns which are not labor surplus area concerns.

(If the contract amount exceeds \$500,000.00 the following clause is applicable)

Labor Surplus Area Subcontracting Program:

(a) The Contractor agrees to establish and conduct a program which will encourage labor surplus area concerns to compete for subcontracts within their capabilities. In this connection, the Contractor shall—

(1) Designate a liaison officer who will (i) maintain liaison with duly authorized representatives of the Government on labor surplus area matters, (ii) supervise compliance with the Utilization of Concerns in Labor Surplus Areas clause, and (iii) administer the Contractor's "Labor Surplus Area Subcontracting Program";

(2) Provide adequate and timely consideration of the potentialities of labor surplus area concerns in all "make-or-buy" decisions;

(3) Assure that labor surplus area concerns will have an equitable opportunity to compete for subcontracts, particularly by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation of labor surplus area concerns;

(4) Maintain records showing procedures which have been adopted to comply with the policies set forth in this clause; and

(5) Include the Utilization of Concerns in Labor Surplus Areas clause in subcontracts which offer substantial labor surplus area subcontracting opportunities.

(b) A "labor surplus area concern" is a concern which will perform, or cause to be performed, a substantial proportion of any contract awarded to it in "Areas of Substantial Labor Surplus" (also called "Areas of Substantial Unemployment"), as designated by the Department of Labor. A concern shall be deemed to perform a substantial proportion of a contract in a labor surplus area if the costs that the concern will incur on account of manufacturing or production performed in persistent or substantial labor surplus

areas (by itself or its first-tier subcontractors) amount to more than 50 percent of the price of such contract.

1d The Contractor further agrees to insert, in any subcontract hereunder which may exceed \$500,000 and which contains the Utilization of Concerns in Labor Surplus Areas clause, provisions which shall conform substantially to the language of this clause, including this paragraph (c), and to notify the Contracting Officer of the names of such subcontractors.

10. SUBCONTRACTS

1a The Contractor shall give advance notification to the Contracting Officer of any proposed subcontract hereunder which (i) is cost-reimbursement type, time and materials, or labor-hour, or (ii) is fixed-price type and exceeds in dollar amount either \$25,000 or 5 percent of the total estimated cost of this contract.

1b In the case of a proposed subcontract which (i) is cost-reimbursement type, time and materials, or labor-hour and which would involve an estimated amount in excess of \$50,000, including any fee, or (ii) is proposed to exceed \$500,000; or (iii) is one of a number of subcontracts under this contract with a single subcontractor for the same or related supplies or services which in the aggregate are expected to exceed \$100,000; the advance notification required by (a) above shall include:

(1) a description of the supplies or services to be called for by the subcontract;

(2) identification of the proposed subcontractor and an explanation of why and how the proposed subcontractor was selected, including the degree of competition obtained;

(3) the proposed subcontract price, together with the Contractor's cost or price analysis thereof;

(4) the subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data when such data and certificate are required, by other provisions of the contract, to be obtained from the subcontractor; and

(5) identification of the type of contract to be used.

1c The Contractor shall not, without the prior written consent of the Contracting Officer, place any subcontract which (i) is cost-reimbursement type, time and materials, or labor-hour, or (ii) is fixed-price type and exceeds in dollar amount either \$25,000 or 5 percent of the total estimated cost of this contract, or (iii) provides for the fabrication, purchase, rental, installation, or other acquisition, of any item of industrial facilities, or of special tooling having a value in excess of \$1,000, or (iv) has experimental, developmental, or research work as one of its purposes. The Contracting Officer may, in his discretion, ratify in writing any such subcontract; such action shall constitute the consent of the Contracting Officer as required by this paragraph (c).

1d The Contractor agrees that no subcontract placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis.

1e The Contracting Officer may, in his discretion, specifically approve in writing any of the provisions of a subcontract. However, such approval or the consent of the Contracting Officer obtained as required by this clause shall not be construed to constitute a determination of the allowability of any cost under this contract, unless such approval specifically provides that it constitutes a determination of the allowability of such cost.

1f The Contractor shall give the Contracting Officer immediate notice in writing of any action or suit filed, and prompt notice of any claim made against the Contractor by any subcontractor or vendor which, in the opinion of the Contractor, may result in litigation, related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

20. INCHASABLE DELAYS

Except with respect to defaults of subcontractors, the Contractor shall not be in default by reason of any failure in performance of this contract in accordance with its terms (including any failure by the Contractor to make progress in the prosecution of the work hereunder which endangers such performance) if such failure arises out of causes beyond the control and without the fault or negligence of the Contractor. Such causes may include, but are not restricted to, acts of God or of the public enemy, acts of the Government in either its sovereign or contractual capacity, fire, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather, but in every case the failure to perform must be beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the failure of a subcontractor to perform or make progress, and if such failure arises out of causes beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either of them, the Contractor shall not be deemed to be in default, unless (a) the supplies or services to be furnished by the subcontractor were obtainable from other sources, (b) the Contracting Officer shall have ordered the Contractor in writing to procure such supplies or services from such other sources, and (c) the Contractor shall have failed to comply reasonably with such order. Upon request of the Contractor, the Contracting Officer shall ascertain the facts and extent of such failure and, if he shall determine that any failure to perform was occasioned by any one or more of the said causes, the delivery schedule shall be revised accordingly, subject to the rights of the Government under the clause hereof entitled "Termination for Default or for Convenience of the Government."

21. INSPECTION AND CORRECTION OF DEFECTS

1a All work under this contract shall be subject to inspection and test by the Government (to the extent practicable) at all times (including the period of performance) and places, and in any event prior to acceptance. The Contractor shall provide and maintain an inspection system acceptable to the Government covering the work hereunder. The Government, through any authorized representative, may inspect the plant or plants of the Contractor or of any of its subcontractors engaged in the performance of this contract. If any inspection or test is made by the Government on the premises of the Contractor or a subcontractor, the Contractor shall provide and shall require subcontractors to provide all reasonable facilities and assistance for the safety and convenience of the Government inspectors in the performance of their duties. All inspections and tests by the Government shall be performed in such a manner as will not unduly delay the work. Except as otherwise provided in this contract, final inspection and acceptance shall be made at the place of delivery as promptly as practicable after delivery and shall be deemed to have been made no later than 90 days after the date of such delivery.

of acceptance has not been made earlier within such period.

(b) At any time during performance of this contract, but not later than six months (or such other period as may be provided in the Schedule) after acceptance of all of the end items (other than designs, drawings, or reports) to be delivered under this contract, the Government may require the Contractor to remedy by correction or replacement, as directed by the Contracting Officer, any failure by the Contractor to comply with the requirements of this contract. Any time devoted to such correction or replacement shall not be included in the computation of the period of time specified in the preceding sentence, except as provided in (c) below. Except as otherwise provided in paragraph (c) below, the allowability of the cost of any such replacement or correction shall be determined as provided in the clause of this contract entitled "Allowable Cost, Fixed Fee and Payment," but no additional fee shall be payable with respect thereto. Corrected articles shall not be tendered again for acceptance unless the former tender and the requirement of correction is disclosed. If the Contractor fails to proceed with reasonable promptness to perform such replacement or correction, the Government (i) may by contract or otherwise perform such replacement or correction and charge to the Contractor any increased cost occasioned the Government thereby, or may reduce any fixed fee payable under this contract (or require repayment of any fixed fee theretofore paid) in such amount as may be equitable under the circumstances, or (ii) in the case of articles not delivered, may require the delivery of such articles, and shall have the right to reduce any fixed fee payable under this contract (or to require repayment of any fixed fee theretofore paid) in such amount as may be equitable under the circumstances, or (iii) may terminate this contract for default. Failure to agree to the amount of any such increased cost to be charged to the Contractor or to such reduction in, or repayment of, the fixed fee shall be deemed to be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes."

(c) Notwithstanding the provisions of paragraph (b) above, the Government may at any time require the Contractor to remedy by correction or replacement, without cost to the Government, any failure by the Contractor to comply with the requirements of this contract if such failure is due to fraud, lack of good faith or willful misconduct 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 (i) all or substantially all of the Contractor's business, or (ii) all or substantially all of the Contractor's operations at any one plant or separate location in which this contract is being performed, or (iii) a separate and complete major industrial operation in connection with the performance of this contract. The Government may at any time also require the Contractor to remedy by correction or replacement, without cost to the Government, any such failure caused by one or more individual employees selected or retained by the Contractor after any one's supervisory personnel has reasonable grounds to believe that any such employee is habitually careless or otherwise unqualified.

(d) The provisions of paragraph (b) above shall apply to any corrected or replacement item or component until six months after its acceptance.

(e) The Contractor shall make its records of all inspection work available to the Government during the performance

of this contract and for such longer period as may be specified in this contract.

22. INSURANCE-LIABILITY TO THIRD PERSONS

(a) The Contractor shall procure and thereafter maintain workmen's compensation, employer's liability, comprehensive general liability (bodily injury) and comprehensive automobile liability (bodily injury and property damage) insurance, with respect to performance under this contract, and such other insurance as the Contracting Officer may from time to time require with respect to performance under this contract: *Provided*, That the Contractor may, with the approval of the Contracting Officer, maintain a self-insurance program; *And provided further*, That with respect to workmen's compensation the Contractor is qualified pursuant to statutory authority. All insurance required pursuant to the provisions of this paragraph shall be in such form, in such amount, and for such periods of time, as the Contracting Officer may from time to time require or approve, and with insurers approved by the Contracting Officer.

(b) The Contractor agrees, to the extent and in the manner required by the Contracting Officer, to submit for the approval of the Contracting Officer any other insurance maintained by the Contractor in connection with the performance of this contract and for which the Contractor seeks reimbursement hereunder.

(c) The Contractor shall be reimbursed: (1) for the portion allocable to this contract of the reasonable cost of insurance as required or approved pursuant to the provisions of this clause, and (2) for liabilities to third persons for loss of or damage to property (other than property (i) owned, occupied or used by the Contractor or rented to the Contractor or (ii) in the care, custody, or control of the Contractor), or for death or bodily injury, not compensated by insurance or otherwise, arising out of the performance of this contract, whether or not caused by the negligence of the Contractor, his agents, servants or employees; *Provided*, Such liabilities are represented by final judgments or by settlements approved in writing by the Government and expenses incidental to such liabilities, except liabilities (a) for which the Contractor is otherwise responsible under the express terms of the clause or clauses, if any, specified in the Schedule, or (b) with respect to which the Contractor has failed to insure as required or maintain insurance as approved by the Contracting Officer or (c) which results from willful neglect 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 (i) all or substantially all of the Contractor's business, or (2) all or substantially all of the Contractor's operations at any one plant or separate location in which this contract is being performed, or (3) a separate and complete major industrial operation in connection with the performance of this contract. The foregoing shall not restrict the right of the Contractor to be reimbursed for the cost of insurance maintained by the Contractor in connection with the performance of this contract other than insurance required to be submitted for approval or required to be procured and maintained pursuant to the provisions of this clause: *Provided*, Such cost would constitute allowable cost under the clause of this contract entitled "Allowable Cost, Fixed Fee and Payment."

(d) The Contractor shall give the Government or its representatives immediate notice of any suit or action filed, and prompt notice of any claim made, against the Contractor arising out of the performance of this contract, the cost and expense of which may be reimbursable to the Contractor under the provisions of this contract, and the risk of which is then uninsured or in which the amount claimed exceeds the amount of coverage. The Contractor shall furnish immediately to the Government copies of all pertinent papers received by the Contractor. If the amount of the liability claimed exceeds the amount of coverage, the Contractor shall authorize representatives of the Government to collaborate with counsel for the insurance carrier, if any, in settling or defending such claim. If the liability is not insured or covered by bond, the Contractor shall, if required by the Government, authorize representatives of the Government to settle or defend any such claim and to represent the Contractor in or take charge of any litigation in connection therewith; *Provided*, That the Contractor may, at his own expense, be associated with the representatives of the Government in the settlement or defense of any such claim or litigation.

23. PAYMENT FOR OVERTIME PREMIUMS

(a) Allowable cost shall not include any amount on account of overtime premiums, except to the extent that they either (i) are approved in writing by the Contracting Officer or (ii) are paid for work—

(1) necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature.

(2) by indirect labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting.

(3) in the performance of tests, industrial processes, laboratory procedures, loading or unloading of transportation media, and operations in flight or afloat, which are continuous in nature and cannot reasonably be interrupted or otherwise completed, or

(4) which will result in lower overall cost to the Government.

(b) The cost of overtime premiums otherwise allowable under (a) above shall be allowed only to the extent the amount thereof is reasonable and properly allocable to the work under this contract.

24. NEGOTIATED OVERHEAD RATES

(a) Notwithstanding the provisions of the clause of this contract entitled "Allowable Cost, Fixed Fee and Payment", the allowable indirect costs under this contract shall be obtained by applying negotiated overhead rates to bases agreed upon by the parties, as specified below.

(b) The Contractor, as soon as possible, but not later than 90 days after the expiration of each of the Contractor's financial years or such other period as may mutually be agreed upon by the Government and the Contractor, shall submit to the Contracting Officer, via the cognizant audit agency, a proposed final overhead rate or rates for that period based on the Contractor's cost experience during that period, together with supporting cost data. Negotiation of final overhead rates by the Contractor and the Contracting Officer shall be undertaken as promptly as practicable after receipt of the Contractor's proposal.

(c) Allowability of costs and acceptability of cost allocation methods shall be determined in accordance with Subparagraph 1-12.2 of Part 1-15 of the Federal Procurement Regulations, as in effect on the date of this contract.

(d) The results of each negotiation shall be set forth in an amendment to this contract, which shall specify (1) the agreed final rates, (2) the bases to which the rates apply, and (3) the periods for which the rates apply.

(e) Pending establishment of final overhead rates for any period, the Contractor shall be reimbursed either at negotiated provisional rates as provided in the Schedule or at billing rates acceptable to the cognizant Government Auditor, subject to appropriate adjustment when the final rates for that period are established. To prevent substantial over or under payment, the provisional or billing rates may, at the request of either party, be revised by mutual agreement, either retroactively or prospectively. Any such revision of negotiated provisional rates provided in the Schedule shall be set forth in an amendment to this contract.

(f) Any failure by the parties to agree on any final rate or rates under this clause shall be considered a dispute concerning a question of fact for decision by the Contracting Officer within the meaning of the clause of this contract entitled "Disputes".

25. AUTHORIZATION AND CONSENT

The Government hereby gives its authorization and consent for all use and manufacture of any invention described in and covered by a patent of the United States in performance of this contract or any part hereof or any amendment hereto or any subcontract hereunder (including any lower-tier subcontract).

26. RIGHTS IN DATA—UNLIMITED

(a) The term "Subject Data" as used herein includes writings, sound recordings, pictorial reproduction, drawings or other graphical representations, and works of any similar nature (whether or not copyrighted) which are specified to be delivered under this contract. The term does not include financial reports, cost analyses and similar information incidental to contract administration.

(b)(1) The Government may duplicate, use, and disclose in any manner and for any purpose whatsoever, and have others so do, all Subject Data delivered under this contract.

(2) The Contractor agrees to and does hereby grant to the Government, and to its officers, agents, and employees acting within the scope of their official duties, a royalty-free, non-exclusive, irrevocable license throughout the world, to publish, translate, deliver, perform, dispose of, and to authorize others so to do all Subject Data now or hereafter covered by copyright.

(3) The Contractor shall report to the Contracting Officer promptly and in reasonably written detail, each notice or claim of copyright infringement with respect to all Subject Data delivered under this contract.

(c) Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government under any patent.

(d) The Contractor shall not affix any restrictive markings upon any Subject Data, and if such markings are affixed, the Government shall have the right at any time to modify, remove, obliterate or ignore any such markings.

27. PATENT RIGHTS

(a) Whenever any invention, improvement, or discovery (whether or not patentable) is made or conceived or for the first time actually or constructively reduced to practice, by the Contractor or its employees, in the course of, in connection with, or under the terms of this contract, the Contractor shall immediately give the Contracting Officer written notice thereof, and shall promptly thereafter furnish the Contracting Officer with complete information thereon; and the Administrator shall have the sole and exclusive power to determine whether or not and where a patent application shall be filed, and to determine the disposition of all rights in such invention, improvement, or discovery, including title to and rights under any patent application or patent that may issue thereon. The determination of the Administrator on all these matters shall be accepted as final and the provisions of the clause of this contract entitled "Disputes" shall not apply; and the Contractor agrees that it will, and warrants that all of its employees who may be the inventors will, execute all documents and do all things necessary or proper to the effectuation of such determination.

(b) Except as otherwise authorized in writing by the Contracting Officer, the Contractor shall obtain patent agreements to effectuate the provisions of this clause from all persons who perform any part of the work under this contract, except such clerical and manual labor personnel as will have no access to technical data.

(c) Except as otherwise authorized in writing by the Contracting Officer, the Contractor will insert in each subcontract, having experimental, developmental, or research work as one of its purposes, provisions making this clause applicable to the subcontractor and its employees.

(d) If the Government obtains patent rights pursuant to this clause of this contract, the Contractor shall be offered license rights thereto on terms at least as favorable as those offered to any other firm.

(e) In the event no inventions, improvements or discoveries (whether or not patentable) are made or conceived, or for the first time actually or constructively reduced to practice, by the Contractor or its employees in the course of, in connection with, or under the terms of this contract, the Contractor shall so certify to the Contracting Officer before final payment hereunder.

28. RECOVERY OF COSTS

(a) As may be determined by the Contracting Officer to be fair, reasonable and equitable, the Contractor shall pay to the Government up to 5% of sums hereafter received by or credited to the Contractor or its privies (including subcontractors) on sales or leases (exclusive of sales or leases to the U.S. Government, either directly or indirectly through Government prime contractors or subcontractors) of any equipment which is substantially the same in design as, or which is directly derived from, that developed by the Contractor or any of its subcontractors in the performance of this contract.

(b) In selling or leasing the equipment identified in paragraph (a) above to the Government, either directly or indirectly through Government prime contractors or subcontractors, the Contractor or its privies (including subcontractors) shall notify the purchaser or lessee in writing that the equipment was developed under a Federal Aviation

Agency contract containing a Recovery of Costs clause and that the purchase or lease price of such equipment is less than the price of such equipment when sold or leased to others than the Government by an amount no less than the Government's share under the Recovery of Costs clause. A copy of each such notice shall be sent to the Contracting Officer.

(c) As may be determined by the Contracting Officer to be fair, reasonable and equitable, the Contractor shall also pay to the Government up to 33% of all sums hereafter received by, or credited to, the Contractor or its privies (including subcontractors) as payments under technical agreements permitting others to sell, lease, or manufacture, the equipment identified in paragraph (a) above.

(d) Recovery by the Government under this clause shall be limited to amounts paid and credited to the Contractor under this contract. Payments to the Government under this clause shall not be so high as to destroy the Contractor's competitive position for the equipment involved, provided that the equipment is otherwise reasonably priced and efficiently and economically produced.

(e) The Contractor shall report to the Government all sales, leases, licensing agreements, royalties and receipts, which might reasonably be considered to be subject to this clause; and the Contractor shall promptly render accurate, certified accounts thereon to the Government at reasonable intervals.

29. PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA

(a) If the Contracting Officer determines that any price, including profit or fee, negotiated in connection with this contract was increased by any significant sums because the Contractor, or any subcontractor in connection with a subcontract covered by (c) below, furnished incomplete or inaccurate cost or pricing data or data not current as certified in his Contractor's Certificate of Current Cost or Pricing Data, then such price shall be reduced accordingly and the contract shall be modified in writing to reflect such adjustment.

(b) Failure to agree on a reduction shall be a dispute concerning a question of fact within the meaning of the "Disputes" clause of this contract.

(c) The Contractor agrees to insert the substance of paragraphs (a) and (c) of this clause in each of his cost-reimbursement type, time and material, labor-hour, price redeterminable, or incentive subcontracts hereunder in excess of \$100,000, and in any other subcontract hereunder in excess of \$100,000 unless the price is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation. In each such excepted subcontract hereunder which exceeds \$100,000, the Contractor shall insert the substance of the following clause:

Price Reduction for Defective Cost or Pricing Data—Price Adjustments

(a) This clause shall become operative only with respect to any change or other modification made pursuant to one or more provisions of this contract which involves a price adjustment in excess of \$100,000 that is not based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation. The right to price reduction under this clause shall be limited to such price adjustments.

(b) If the Contractor determines that any price, including profit or fee, negotiated in connection with any price adjustment within the purview of paragraph (a) above was increased by any significant sums because the subcontractor or any of his subcontractors in connection with a subcontract covered by paragraph (c) below, furnished incomplete or inaccurate cost or pricing data or data not current as of the date of execution of the subcontractor's certificate of current cost or pricing data, then such price shall be reduced accordingly and the subcontract shall be modified in writing to reflect such adjustment.

(d) The subcontractor agrees to insert the substance of this clause in each subcontract hereunder which exceeds \$100,000.

30. AUDIT AND RECORDS

(a) The Contractor shall maintain books, records, documents, and other evidence and accounting procedures and practices, sufficient to reflect properly all direct and indirect costs of whatever nature claimed to have been incurred and anticipated to be incurred for the performance of this contract. The foregoing constitute "records" for the purposes of this clause.

(b) The Contractor's plants, or such part thereof as may be engaged in the performance of this contract, and his records shall be subject at all reasonable times to inspection and audit by the Contracting Officer or his authorized representative.

(c) The Contractor shall preserve and make available his records (1) until the expiration of three years from the date of final payment under this contract, and (2) for such longer period, if any, as is required by applicable statute, or by other clauses of this contract, or by (i) or (ii) below.

(4) If this contract is completely or partially terminated, the records relating to the work terminated shall be preserved and made available for a period of three years from the date of any resulting final settlement.

(4) Records which relate to (A) appeals under the "Disputes" clause of this contract or (B) litigation or the settlement of claims arising out of the performance of this contract, shall be retained until such appeals, litigation, or claims have been disposed of.

(d) (1) The Contractor shall insert the substance of this clause, including the whole of this paragraph (d), in each subcontract hereunder that is not on a firm fixed-price basis.

(2) The Contractor shall insert the substance of the following clause in each firm fixed-price subcontract hereunder in excess of \$100,000, except those subcontracts covered by subparagraph (3) below:

Audit

(a) For purposes of verifying that cost or pricing data submitted in conjunction with the negotiation of this contract or any contract change or other modification involving an amount in excess of \$100,000 are accurate, complete, and current, the Contracting Officer, or his authorized representatives, shall, until the expiration of three years from the date of final payment under this contract, have the right to examine those books, records, documents, and other supporting data which will permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used therein, which were available

to the Contractor as of the date of execution of his Contractor's Certificate of Current Cost or Pricing Data.

(b) The Contractor agrees to insert the substance of this clause including this paragraph (b) in all subcontracts hereunder in excess of \$100,000 where the price is not based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation.

(3) The Contractor shall insert the substance of the following clause in each firm fixed-price subcontract hereunder in excess of \$100,000 where the price is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation.

Audit—Price Adjustments

(a) This clause shall become operative only with respect to any change or other modification made pursuant to one or more provisions of this contract which involves a price adjustment in excess of \$100,000, that is not based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation and further provided that such change or other modification to this contract must result from a change or other modification to the Government prime contract.

(b) For purposes of verifying that any cost or pricing data submitted in conjunction with a contract change or other modification involving an amount in excess of \$100,000 are accurate, complete, and current, the Contracting Officer, or his authorized representatives, shall, until the expiration of three years from the date of final payment under this contract, have the right to examine those books, records, documents and other supporting data which will permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used therein, which were available to the Contractor as of the date of execution of his Contractor's Certificate of Current Cost or Pricing Data.

(c) The Contractor agrees to insert the substance of this clause including this paragraph (c) in all subcontracts hereunder in excess of \$100,000, so as to apply until three years after final payment of the subcontract.

31. SUBCONTRACTOR COST AND PRICING DATA

(a) The Contractor shall require subcontractors hereunder to submit in writing cost or pricing data under the following circumstances:

(1) Prior to award of any cost-reimbursement type, time and material, labor-hour, incentive, or price redeterminable subcontract, the price of which is expected to exceed \$100,000; and

(2) Prior to the award of any other subcontract, the price of which is expected to exceed \$100,000 or to the pricing of any subcontract change or other modification for which the price adjustment is expected to exceed \$100,000, where the price or price adjustment is not based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation.

(b) The Contractor shall require subcontractors to certify, in substantially the same form as that used in the certificate by the Prime Contractor to the Government, that, to the best of their knowledge and belief, the cost and pricing data

submitted under (a) above are accurate, complete, and current as of the date of the execution, which date shall be as close as possible to the date of agreement on the negotiated price of the subcontract or subcontract change or modification.

(c) The Contractor shall insert the substance of this clause including this paragraph (c) in each of his cost-reimbursement type, time and material, labor-hour, price redeterminable, or incentive subcontracts hereunder, and in any other subcontract hereunder which exceeds \$100,000 unless the price thereof is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation. In each such excepted subcontract hereunder which exceeds \$100,000, the Contractor shall insert the substance of the following clause:

Subcontractor Cost and Pricing Data—Price Adjustments

(a) Paragraphs (b) and (c) of this clause shall become operative only with respect to any change or other modification made pursuant to one or more provisions of this contract which involves a price adjustment in excess of \$100,000. The requirements of this clause shall be limited to such price adjustments.

(b) The Contractor shall require subcontractors hereunder to submit cost or pricing data under the following circumstances:

(1) Prior to award of any cost-reimbursement type, time and material, labor-hour, incentive, or price redeterminable subcontract, the price of which is expected to exceed \$100,000; and

(2) Prior to award of any other subcontract, the price of which is expected to exceed \$100,000, or to the pricing of any subcontract change or other modification for which the price adjustment is expected to exceed \$100,000, where the price or price adjustment is not based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation.

(c) The Contractor shall require subcontractors to certify, in substantially the same form as that used in the Certificate by the Prime Contractor to the Government, that, to the best of their knowledge and belief, the cost and pricing data submitted under (b) above are accurate, complete, and current as of the date of the execution, which date shall be as close as possible to the date of agreement on the negotiated price of the contract modification.

(d) The Contractor shall insert the substance of this clause including this paragraph (d) in each subcontract hereunder which exceeds \$100,000.

32. GOVERNMENT PROPERTY

(a) The Government shall deliver to the Contractor, for use in connection with and under the terms of this contract, the property described in the Schedule or specifications, together with such related data and information as the Contractor may request and as may reasonably be required for the intended use of such property (hereinafter referred to as "Government-furnished Property"). The delivery or performance dates for the supplies or services to be furnished by the Contractor under this contract are based upon the expectation that Government-furnished Property suitable for use will be delivered to the Contractor at the times stated in the Schedule or, if not so stated, in sufficient

time to enable the Contractor to meet such delivery or performance dates. In the event that Government-furnished Property is not delivered to the Contractor by such time or times, the Contracting Officer shall, upon timely written request made by the Contractor, make a determination of the delay occasioned the Contractor and shall equitably adjust the estimated cost, fixed fee, or delivery or performance dates, or all of them, and any other contractual provisions affected by such delay, in accordance with the procedures provided for in the clause of this contract entitled "Changes." In the event that Government-furnished Property is received by the Contractor in a condition not suitable for the intended use, the Contractor shall, upon receipt thereof notify the Contracting Officer of such fact and act as directed by the Contracting Officer. Upon completion of such action the Contracting Officer upon written request of the Contractor shall equitably adjust the estimated cost, fixed fee, or delivery or performance dates, or all of them, and any other contractual provision affected by the return or disposition, or the repair or modification, in accordance with the procedures provided for in the clause of this contract entitled "Changes." The foregoing provisions for adjustment are exclusive and the Government shall not be liable to suit for breach of contract by reason of any delay in delivery of Government-furnished Property or delivery of such property in a condition not suitable for its intended use.

(b) Title to all property furnished by the Government shall remain in the Government. Title to all property purchased by the Contractor, for the cost of which the Contractor is entitled to be reimbursed as a direct item of cost under this contract, shall pass to and vest in the Government upon delivery of such property by the vendor. Title to other property, the cost of which is reimbursable to the Contractor under the contract, shall pass to and vest in the Government upon (i) issuance for use of such property in the performance of this contract, or (ii) commencement of processing or use of such property in the performance of this contract, or (iii) reimbursement of the cost thereof by the Government in whole or in part, whichever first occurs. All Government-furnished Property, together with all property acquired by the Contractor title to which vests in the Government under this paragraph, are subject to the provisions of this clause and are hereinafter collectively referred to as "Government Property."

(c) Title to the Government Property shall not be affected by the incorporation or attachment thereof to any property not owned by the Government, nor shall such Government Property, or any part thereof, be or become a fixture or lose its identity as personalty by reason of affixation to any realty. The Contractor agrees to promptly account for all Government Property and to maintain a suitable inventory control system acceptable to the Contracting Officer.

(d) The Government Property provided or furnished pursuant to the terms of this contract shall, unless otherwise provided herein, be used only for the performance of this contract.

(e) The Contractor shall maintain and administer in accordance with sound industrial practice, a program, for the maintenance, repair, protection and preservation of Government Property so as to assure its full availability and usefulness for the performance of this contract. The Contractor shall take all reasonable steps to comply with

all appropriate directions or instructions which the Contracting Officer may prescribe as reasonably necessary for the protection of Government Property.

(1) The Contractor shall not be liable for any loss of or damage to the Government Property, or for expenses incidental to such loss or damage, except that the Contractor shall be responsible for any such loss or damage (including expenses incidental thereto)—

(i) which results from willful misconduct or lack of good faith on the part of any one of the Contractor's directors or officers, or on the part of any of his 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 any one plant or separate location in which this contract is being performed, or

(C) a separate and complete major industrial operation in connection with the performance of this contract;

(ii) which results from a failure on the part of the Contractor, due to the willful misconduct or lack of good faith on the part of any of his directors, officers, or other representatives mentioned in subparagraph (i) above,

(A) to maintain and administer, in accordance with sound industrial practice, the program for maintenance, repair, protection and preservation of Government Property as required by paragraph (e) hereof, or

(B) to take all reasonable steps to comply with any appropriate written directions of the Contracting Officer under paragraph (e) hereof;

(iii) for which the Contractor is otherwise responsible under the express terms of the clause or clauses designated in the Schedule;

(iv) which results from a risk expressly required to be insured under this contract, 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; or

(v) 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; provided that, if more than one of the above exceptions shall be applicable in any case, the Contractor's liability under any one exception shall not be limited by any other exception. This clause shall not be construed as relieving a subcontractor from liability for loss or destruction of or damage to Government Property in his possession or control, except to the extent that the subcontract, with the prior approval of the Contracting Officer, may provide for the relief of the subcontractor from such liability. In the absence of such approval, the subcontract shall contain appropriate provisions requiring the return of all Government Property in as good condition as when received, except for reasonable wear and tear or for the utilization of the property in accordance with the provisions of the prime contract.

(2) The Contractor shall not be reimbursed for, and shall not include as an item of overhead, the cost of insurance, or any provision for a reserve, covering the risk of loss of or damage to the Government Property, except to the extent that the Government may have required the Contractor to carry such insurance under any other provisions of this contract.

(3) Upon the happening of loss or destruction of or damage to the Government Property, the Contractor shall notify the Contracting Officer or his designated representative thereof; and 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 all the details concerning the loss or damage and the insurance coverage, if any. The Contractor shall make repairs and renovations of the damaged Government Property or take such other action, as the Contracting Officer directs.

(4) In the event the Contractor is indemnified, reimbursed, or otherwise compensated for any loss or destruction of or damage to the Government Property, he shall use the proceeds to repair, renovate or replace the Government Property involved, or shall credit such proceeds against the cost of the work covered by the contract, or shall otherwise reimburse the Government, as directed by the Contracting Officer. The Contractor shall do nothing to prejudice the Government's right 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. In addition, where the subcontractor has not been relieved from liability for any loss or destruction of or damage to Government Property, the Contractor shall enforce the liability of the subcontractor for such loss or destruction of or damage to the Government Property for the benefit of the Government.

(5) The Government shall at all reasonable times have access to the premises where any of the Government Property is located.

(6) The Government Property shall remain in the possession of the Contractor for such period of time as is required for the performance of this contract unless the Contracting Officer determines that the interests of the Government require removal of such property. In such case the Contractor shall promptly take such action as the Contracting Officer may direct with respect to the removal and shipping of Government Property. In any such instance, the contract may be amended to accomplish an equitable adjustment in the terms and provisions thereof.

(7) Upon the completion of this contract, or at such earlier date as may be fixed by the Contracting Officer, the Contractor shall submit to the Contracting Officer in a form acceptable to him, inventory schedules covering all items of the Government Property not consumed in the performance of this contract, or not theretofore delivered to the Government, and shall deliver or make such other disposal of such Government Property as may be directed or authorized by the Contracting Officer. The net proceeds of any such disposal shall be credited to the cost of the work covered by the contract or shall be paid in such manner as the Contracting Officer may direct. The foregoing provisions shall apply to scrap from Government Property; provided, however, that the Contracting Officer may authorize or direct the Contractor to omit from such inventory schedules any scrap consisting of faulty castings or forgings, or cutting and processing waste, such as chips, cuttings, borings, turnings, short ends, circles, trimmings, clippings, and

remnants, and to dispose of such scrap in accordance with the Contractor's normal practice and account therefor as a part of general overhead or other reimbursable cost in accordance with the Contractor's established accounting procedures.

(j) Unless otherwise provided herein, the Government shall not be under any duty or obligation to restore or rehabilitate, or to pay the costs of the restoration or rehabilitation of the Contractor's plant or any portion thereof which is affected by the removal of any Government Property.

(k) Directions of the Contracting Officer and communications of the Contractor issued pursuant to this clause shall be in writing.

33. RENEGOTIATION

(a) To the extent required by law, this contract is subject to the Renegotiation Act of 1951 (50 U.S.C. App. 1211, et seq.), as amended, and to any subsequent act of Congress providing for the renegotiation of contracts. Nothing contained in this clause shall impose any renegotiation obligation with respect to this contract or any subcontract hereunder which is not imposed by an act of Congress heretofore or hereafter enacted. Subject to the foregoing, this contract shall be deemed to contain all the provisions required by Section 104 of the Renegotiation Act of 1951, and by any such other act, without subsequent contract amendment specifically incorporating such provisions.

(b) The Contractor agrees to insert the provisions of this clause, including this paragraph, in all subcontracts, as that term is defined in Section 103g of the Renegotiation Act of 1951, as amended.

34. NOTICE TO THE GOVERNMENT OF LABOR DISPUTES

(a) Whenever the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice thereof, including all relevant information with respect thereto, to the Contracting Officer.

(b) The Contractor agrees to insert the substance of this clause, including this paragraph (b), in any subcontract hereunder as to which a labor dispute may delay the timely performance of this contract; except that each such subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the subcontractor shall immediately notify his next higher tier subcontractor, or the prime contractor, as the case may be, of all relevant information with respect to such dispute.

35. QUALITY OF MATERIALS, WORKMANSHIP, AND DESIGN

Any equipment to be furnished under this contract shall be manufactured and processed in a careful and workmanlike manner. All details of design, construction and installation shall present a neat appearance and shall accord with the best commercial standards and practices. Unless otherwise specified, all materials, supplies and components to be furnished must be new, unused, of current production, and of the most suitable grade for the purpose intended.

36. COLLECTION OF INFORMATION

In performance of this contract the Contractor shall not collect information upon identical items from 10 or more persons by use of written report forms, application forms, schedules, questionnaires, or other similar methods, unless authorized in writing to do so by the Contracting Officer.

37. OTHER CONTRACTORS

(a) The Government may undertake or award other contracts for additional or related work, and the Contractor shall fully cooperate with such other contractors and Government employees and carefully fit its own work to such additional work. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor or by Government employees.

(b) The foregoing paragraph shall be included in the contracts of all contractors with whom this Contractor will be required to cooperate. The Government shall equitably enforce this clause as to all contractors, to prevent the imposition of unreasonable burdens on any contractor.

38. DISSEMINATION OF CONTRACT INFORMATION

The Contractor shall not publish, permit to be published, or distribute for public consumption, any information, oral or written, concerning the objectives, results or conclusions made pursuant to performance of this contract, without the prior written consent of the Director, Systems Research and Development Service, Federal Aviation Agency. (Two copies of any material proposed to be published or distributed shall be submitted.)

39. 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 Administrator 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 Administrator or his duly authorized representative 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 Administrator 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.

40. NOTICE TO THE GOVERNMENT REGARDING LATE DELIVERY

In the event the Contractor encounters difficulty in meeting performance requirements, or anticipates difficulty in complying with the contract delivery schedule or date, the Contractor shall immediately notify the Contracting Officer thereof in writing, giving pertinent details, including the date by which it expects to complete performance or make delivery; provided, however, that this data shall be informational only in character and that receipt thereof shall not be construed as a waiver by the Government of any contract delivery schedule or date, or any rights or remedies provided by law or under this contract.

41. INTERPRETATION & MODIFICATION

No oral statement of any person, and no written statement of anyone other than the Contracting Officer, or his authorized representative, shall modify or otherwise affect the terms or meaning of the Schedule or any contract resulting therefrom. All requests for interpretations or modifications should be made in writing to the Contracting Officer.

42. NOTICE OF SHIPMENT

Whenever a shipment is made under this contract (regardless of whether the shipment is transported under a commercial or Government bill of lading), the Contractor shall notify the consignee(s) by the most expedient means. The notification shall include the following information: date of shipment; contract number; item number and quantity shipped; and name of carrier accepting shipment from the Contractor. All notifications made by telephone shall be subsequently confirmed in writing.

43. ESTIMATED VALUE OF EQUIPMENT AND PROPERTY

The Contractor shall state on the shipping documents for equipment to be furnished hereunder and for property acquired to which title has been obtained by the Government or to which the Government has an option to take title, the estimated cost for each item of such equipment or property. Such estimated cost shall be determined in accordance with sound accounting principles and shall exclude costs for design and development engineering and for any unusual testing.

44. EQUAL OPPORTUNITY COMPLIANCE REPORTING

(The following clause is applicable unless this contract is exempt under the rules and regulations of the President's Committee on Equal Employment Opportunity. Exemptions are defined in the clause of this contract titled "Equal Opportunity".)

If the price of this contract or any first-tier subcontract awarded hereunder is \$50,000 or more (\$100,000 or more if solely for standard commercial supplies or raw materials) and if the Contractor or first-tier subcontractor has 50 or more employees at any time during the performance of the contract or subcontract, the Contractor shall submit, and shall require such subcontractor to submit, Standard Form 40 ("Compliance Report") or Form EEO-10 ("Plans for Progress Report") to the President's Committee on Equal Employment Opportunity, in accordance with the Instructions printed with Standard Form 40. For each Standard Form 40 or Form EEO-10 submitted by the Contractor or subcontractor to the President's Committee during the life of this contract, the Contractor, not later than 15 days after his own submittal and 30 days after a subcontractor's submittal, shall submit a completed Standard Form 40A to the Contracting Officer. The Contracting Officer will furnish the Contractor with copies of Standard Forms 40 and 40A. If the price of this contract is \$50,000 or more (\$100,000 or more if solely for standard commercial supplies or raw materials), the Contractor shall inform the Contracting Officer in writing by January 5 and July 5 of each year during which this contract remains in effect, as follows:

(a) If a current Standard Form 40A has not been submitted to the Contracting Officer, advise whether the Contractor had as many as 50 employees on January 1 or July 1;

(b) If a current Standard Form 40A has not been submitted to the Contracting Officer for any first-tier subcontractor or subcontractors performing work under this contract, advise whether such subcontractor or subcontractors were subject on January 1 or July 1 to the Standard Form 40 reporting requirements; and

(c) If no subcontract has been awarded by January 1 or July 1 for the performance of work under this contract, so inform the Contracting Officer.

As used in this clause, "subcontracts" include purchase orders and "subcontractors" include vendors.

45. PRIORITIES, ALLOCATIONS AND ALLOTMENTS

The Contractor shall follow the provisions of DMS Reg. No. 1 and all other applicable regulations and orders of the Business and Defense Services Administration in obtaining controlled materials and other products and materials required for the performance of this contract.

(See paragraph 4-104, Armed Forces Industrial Security Regulation)		DEPARTMENT OF DEFENSE SECURITY REQUIREMENTS CHECK LIST (CLASSIFICATION SPECIFICATIONS) (FOR PRIME AND SUBCONTRACTS INVOLVING CLASSIFIED INFORMATION)			(See Section II, Industrial Security Manual for Safe- guarding Classified Informa- tion)		
1. THIS CHECK LIST IS FOR:		2. CONTRACT NUMBER OR OTHER IDENTIFICATION NUMBER (Prime contracts must be shown for all subcontracts)		3. THIS CHECK LIST IS: (See note below)		4. FACILITY SECURITY CLEARANCE REQUIRED FOR CONTRACT PERFORMANCE OR FOR ACCESS TO CLASSIFIED INFORMATION	
X a. PRIME CONTRACT		a. PRIME FA-SS-66-_____		a. ORIGINAL CHECK LIST		a. TOP SECRET	
b. SUBCONTRACT (Use Item 15 to identify further subcontracting)		b. SUBCONTRACT		X b. REVISED CHECK LIST (Supersedes all previous lists)		Jan. 1, 1967 X b. SECRET	
c. INVITATION TO BID OR REQUEST FOR PROPOSAL		c. INVITATION TO BID OR REQUEST FOR PROPOSAL		c. FINAL CHECK LIST FOR CONTRACT TERMINATION OR COMPLETION		c. CONFIDENTIAL	
5a. NAME AND ADDRESS OF PRIME CONTRACTOR United Aircraft Corporation Pratt & Whitney Aircraft Division West Palm Beach, Florida				b. NAME AND ADDRESS OF COGNIZANT SECURITY OFFICE Defense Contract Administrative Services Region/Atlanta 3100 Maple Drive, N. E. Atlanta, Georgia 30305			
6a. NAME AND ADDRESS OF SUBCONTRACTOR (if applicable) (Use Item 15 to identify further subcontracting)				b. NAME AND ADDRESS OF COGNIZANT SECURITY OFFICE			
7. SECURITY REQUIREMENTS CHECK LIST FOR SUBCONTRACTING FROM THIS ☒ PRIME CONTRACT ☐ SUBCONTRACT WILL BE APPROVED BY				8. ARMED SERVICES TECHNICAL INFORMATION AGENCY (ASTIA) SERVICES			
a. MILITARY ACTIVITY Federal Aviation Agency Washington, D. C. 20553				a. REQUESTED		YES NO	
b. ADDRESS				b. APPROVED		YES NO	
c. FIELD OF INTEREST REGISTER ISSUED				YES NO		YES NO	
9. GENERAL IDENTIFICATION OF THE PROCUREMENT FOR WHICH THIS CHECK LIST APPLIES (If classified, complete this item by separate correspondence) Development of Supersonic Transport Aircraft (Engine) - Phase III Items of information checked below pertain solely to engines and not to airframe designs.							
10. PROPOSED PUBLICITY RELEASES SHALL BE SUBMITTED FOR APPROVAL PRIOR TO RELEASE ☒ DIRECT ☐ THROUGH (Specify) Federal Aviation Agency, Supersonic Transport Development, SS-30 800 Independence Avenue, S. W., Washington, D. C. 20553 TO THE OFFICE OF SECURITY REVIEW, OFFICE OF THE SECRETARY OF DEFENSE FOR REVIEW IN ACCORDANCE WITH THE INDUSTRIAL SECURITY MANUAL.							
11. RESTRICTED DATA IS/IS NOT INVOLVED IN THIS CONTRACT. (If involved, attach AIC/DOJ Classification Guide)							
NOTE: Original Check Lists (Item 3a) are authority for contractors to mark classified information. Revised and Final Check Lists (Items 3b and c) are authority for contractors to remove the requested classified information. Such actions by contractors shall be taken in accordance with the provisions of paragraph 7 of the Industrial Security Manual.							

12. INFORMATION PERTAINING TO PERFORMANCE CHARACTERISTICS, TEST DATA AND DESIGN	TOP SECRET	SECRET	CONFIDENTIAL	CONFIDENTIAL (Modified Handling Authorized)	UN-CLASSIFIED
a. ACCURACY: (1) Not applicable					
(2)					X
b. ALTITUDE: (1)					
(2)					
c. COUNTER COUNTERMEASURES CAPABILITY: (1) Not applicable					
(2)					
d. DEPTH: (1) Not applicable					
(2)					
e. DESIGN INFORMATION: (1) Detailed design information of an advanced nature			X (see Item 15-1)		
(2) Internal engine thermodynamic performance			X		
f. FORMULA OR MATERIAL: (1)			X (see Item 15-2)		
(2)					
g. FUEL/PROPELLANT: (1) TYPE					X
(2) CONSUMPTION					X
(3) CAPACITY Not applicable					
(4)					
h. LETHALITY / CRITICAL EFFECTS: (1) Not applicable					
(2)					
i. MANEUVERABILITY: (1)					X
(2)					
j. OPERATIONAL READINESS (Above Time, Time Cycle): (1)					X
(2)					
k. ORBIT TRAJECTORY: (1) Mission profile					X
(2)					
l. RANGE: (1)					X
(2)					
(3)					

NOTE: For definitions of terms, see Industrial Security Manual, Section II, or Armed Forces Industrial Security Regulation, paragraph 6-104.

Information pertaining to classified contracts or projects, even though such information is unclassified, shall not be released for public dissemination except as provided by the Industrial Security Manual.

12. INFORMATION PERTAINING TO PERFORMANCE CHARACTERISTICS, TEST DATA AND DESIGN	TOP SECRET	SECRET	CONFIDENTIAL	CONFIDENTIAL (Modified Handling Authorized)	UN-CLASSIFIED
m. RELIABILITY: (1)					X
(2)					
n. RESOLUTION: (1) Not applicable					
(2)					
o. SIGNATURE CHARACTERISTICS: (1)					X
(2)					
(3)					
(4)					
p. SPEED/VELOCITY: (1) MAXIMUM					X
(2) CRUISING					X
(3) TAKE-OFF OR LAUNCHING					X
(4) LANDING					X
(5) ACCELERATION AND/OR DECELERATION					X
(6)					
q. SYSTEM CAPACITY: (1) Not applicable					
(2)					
r. TERMINAL BALLISTICS: (1) Not applicable					
(2)					
s. THRUST: (1) CLASS					X
(2) SPECIFIC					X
(3) SPECIFIC FUEL CONSUMPTION Fuel Consumption					X
t. VULNERABILITY (1) Not applicable					
(2)					
u. DOCUMENTATION (1) Status and Progress Reports			X (see Item 15-3)		
(2) Technical Reports			X (see Item 15-3)		
(3) Model and Performance Specifications			X (see Item 15-3)		

Information pertaining to classified contracts or projects, even though such information is unclassified, shall not be released for public dissemination except as provided by the Industrial Security Manual.

NOTE: For definitions of terms, see Industrial Security Manual, Section II, or Armed Forces Industrial Security Regulation, paragraph 6-104.

13. END ITEM PRODUCED UNDER CONTRACT	TOP SECRET	SECRET	CONFIDENTIAL	CONFIDENTIAL (Modified Handling Authority)	UNCLASSIFIED
a. CLASSIFICATION OF END ITEM			X (see Item 15-4)		
b. EXTERNAL VIEW					X
c. MILITARY APPLICATION					
d. NUMBERS CONTRACTED					X
e. PRODUCTION AND PROGRAM SCHEDULES					X
f. RATE OF DELIVERY					X
g. NUMBERS DELIVERED					X
h. DEGREE OF PROTECTION IN TRANSIT			X (see Item 15-4)		
i. UNIT COST					X
j. Engine weight					X
14. ADDITIONAL (Attach additional sheets, if necessary)					X
a. External Mockups					
b. Models/Hardware			X (see Item 15-1)		
c. (continued on attached sheet)					
15. REMARKS (Attach additional sheets if necessary and continue paragraph designation) 1. As a general guideline, all data revealing (1) engine internal thermodynamic performance, or (2) detailed design information of an advanced nature, is classified CONFIDENTIAL. However, manufacturing drawings, layouts, and engine parts, which do not directly identify the items as SST engine components, may be treated as unclassified. 2. Classification applies only to (1) new formulas and materials developed under this program, representing advanced state-of-the-art, or (2) formulas and materials which are classified under military programs. 3. Documentation is to be classified according to content, in accordance with the guidelines contained herein. (continued on attached sheet)					
REQUIRED DISTRIBUTION: ☒ PRIME CONTRACTOR (Item 5a) ☒ COGNIZANT SECURITY OFFICE (Item 5b) ☒ DIRECTOR, FEDERAL BUREAU OF INVESTIGATION WASHINGTON, D.C. (Only for Items 1a & 1b) RECEIVED (4 copies) ☐ SUBCONTRACTOR (Item 5a) ☐ COGNIZANT SECURITY OFFICE (Item 5b) ☐ ARMED SERVICES TECHNICAL INFORMATION AGENCY ARLINGTON HALL, ARLINGTON, VIRGINIA (Only when Item 5b is marked "Yes") ADDITIONAL DISTRIBUTION: ☒ RTD:WPAFT, Ohio ☒ NASA, Washington, D. C.			REFER ALL QUESTIONS PERTAINING TO THIS CHECK LIST TO THE APPROVING OFFICIAL BELOW FORGOING SECURITY REQUIREMENTS CHECK LIST APPROVED BY DEPARTMENT OF DEFENSE CONTRACTING OFFICER OR HIS REPRESENTATIVE. SIGNATURE TYPED NAME AND TITLE OF APPROVING OFFICIAL CONTRACTING MILITARY ACTIVITY AND ADDRESS Federal Aviation Agency 800 Independence Avenue, S. W. Washington, D. C. 20553		

Information pertaining to classified contracts or projects, even though such information is unclassified, shall not be released for public dissemination except as provided by the Industrial Security Manual.

DD FORM 254 CONTINUATION SHEET

Confidential

Unclassified

14. ADDITIONAL (continued)

- | | |
|--|-------------------|
| c. Type of Engine Cycle | X |
| d. General Non-Dimensional Material Schematic of Engine without cooling air flows | X |
| e. Turbine inlet temperature | X (see Item 15-5) |
| f. Overall engine performance; including thrust, specific fuel consumption, air flow rate, fuel flow rate, rotor speed(s), exhaust gas temperature, maximum allowable power extraction and air bleed, air bleed pressures and temperatures, effects on engine performance of power extraction and air bleed, and secondary air flow rates; over the complete operating envelope. | X |
| g. Type of fuel and lubricant | X |
| h. Fuel and lubricant fluid flow schematics | X |
| i. Servicing features | X |
| j. Internal thermodynamic details; including actual metal temperatures, internal air cooling flow schematics, air cooling flow rates and temperatures, etc. | X |
| k. Engine operating envelope, including maximum transients and light-off envelope (primary engine and augmentor) | X |

15. REMARKS (continued)

4. Classification applies only when engine is disassembled to the extent that classified design information is revealed.

5. Specific turbine inlet temperature is classified; however, unclassified reference may be made to "above 2000°F Class."