

This document consists of 44 pages.
No. 25 of 25 copies, Series A.

CONTRACT NO. AT(30-1)-510

*as per specification
secret
Jetta*

ATOMIC ENERGY COMMISSION
CONTRACT

CONTRACTOR & ADDRESS:

BRUSH BERYLLIUM COMPANY
4301 Perkins Avenue
Cleveland 3, Ohio

CONTRACT FOR:

RESEARCH, DEVELOPMENT AND
PRODUCTION

LOCATION:

Cleveland, Ohio

AMOUNT OF INITIAL COMMISSION
OBLIGATION:

\$538,250.00

PAYMENT TO BE MADE BY:

Division of Disbursement, U. S.
Treasury Department, New York,
N. Y. (Submit invoices to:
U. S. Atomic Energy Commission,
P. O. Box 30, Ansonia Station,
New York 23, New York.)

CONTRACT NO. AT(30-1)-510

THIS CONTRACT, entered into the 1st day of November, 1949, effective as of the 1st day of January, 1949, by and between THE UNITED STATES OF AMERICA (hereinafter referred to as the "Government") and BRUSH BERYLLIUM COMPANY (hereinafter referred to as the "Contractor"), a corporation organized and existing under the laws of the State of Ohio with its principal office and place of business at No. 4301 Perkins Avenue, Cleveland 3, Ohio;

WITNESSETH THAT:

WHEREAS, the Government, acting through the Atomic Energy Commission (hereinafter referred to as the "Commission"), desires the Contractor to perform certain research, development and production work and the Contractor is willing to do so; and

WHEREAS, this contract is authorized by the Atomic Energy Act of 1946;

NOW, THEREFORE, the parties hereto do mutually agree as follows:

ARTICLE I - WORK

1. Research and Development Work. The Contractor shall conduct and/or perform such studies, experimental investigations and other work in the fields of beryllium and zirconium as are specified in a Secret Letter from the Commission to the Contractor dated January 1, 1949, and accepted by the Contractor, a duplicate original of which is on file in the New York Office of the Commission. The Contractor shall prepare and submit to the Commission the following reports on said work:

- (i) monthly progress reports;
- (ii) interim technical reports on completion of specific phases of the work; and
- (iii) a final report summarizing its activities, findings and conclusions.

Such reports shall be so submitted in such quantity and form as may be directed by the Commission.

2. Production Work. The Contractor shall produce beryllium products and shall fabricate, purify and perform other work with respect to beryllium materials and/or beryllium products, all in accordance with the aforementioned Secret Letter.

3. The Contractor shall provide such guard forces at the sites of the said work, with such uniforms and equipment, as the Commission may require or approve.

4. The said work shall be subject (i) to the general supervision of the Commission, and (ii) to the Commission authorizations and approvals hereinafter provided for in this contract.

5. In carrying out the said work the Contractor is authorized to and shall, subject to applicable provisions of this contract, do all things deemed necessary or desirable including, but not limited to, the employment or other obtainment of all personnel to be engaged therein, the training of such personnel to the extent approved by the Commission, the providing of all premises, services, materials, tools, machinery, equipment and supplies (except such as the Government is to or may furnish or supply as elsewhere provided in this contract), the preparation of materials and products, the storage of materials, tools, machinery, equipment, supplies and products, and the distribution and shipment of products.

ARTICLE II - FISCAL

1. Consideration. In full and complete compensation for its undertakings and performance under this contract the Contractor shall receive the following from the Government:

a. Reimbursement for its costs and expenses as provided for in paragraph 2 of this Article.

b. Payment of the following fixed-fees with respect to the work covered by paragraph 1 of Article I hereof:

<u>For Months of:</u>	<u>Amount of Fixed-Fees:</u>
January, 1949 to June, 1949, both inclusive.	\$2788.85 per month
July, 1949	\$2788.90
August, 1949, to June, 1950, both inclusive.	\$3947.08 per month
July, 1950.	\$3947.12

c. Payment of the following fixed-fees with respect to the work covered by paragraph 2 of Article I hereof:

<u>For Months of:</u>	<u>Amount of Fixed-Fees:</u>
January, 1949, to July, 1949, both inclusive.	\$1600.00 per month
August, 1949, to December, 1949, both inclusive.	\$1466.66 per month
January, 1950	\$1466.70

It is estimated that the reimbursable costs and expenses of the work under this contract will be as follows:

- (i) For work under paragraph 1 of Article I during the period from January, 1949, to July, 1949, both inclusive, the sum of \$327,940.00.
- (ii) For work under paragraph 1 of Article I during the period from August, 1949, to July, 1950, both inclusive, the sum of \$789,426.00.
- (iii) For work under paragraph 2 of Article I during the period from January, 1949, to July, 1949, both inclusive, the sum of \$159,052.00.
- (iv) For work under paragraph 2 of Article I during the period from August, 1949, to January, 1950, both inclusive, the sum of \$126,021.00.

It is expressly understood, however, (a) that neither the Government nor the Contractor guarantees the correctness of any of said estimates, or of any revised estimates, and (b) that there shall be no adjustment in the amount of any fixed-fee hereunder and no claim for increased compensation, because of any errors and/or omissions in computing any of said estimates of cost or any revised estimates thereof, or because any of said estimates of cost or any revised estimate varies from the actual cost.

2. Reimbursable Items of Cost. The Contractor's costs and expenses which shall be reimbursable hereunder, but without duplication, consist of those items arising out of its undertakings

under this contract, including compliance with all Articles hereof, incurred in conformity with the pertinent provisions of this contract, and included within the following itemization, unless expressly excluded by other provisions of this contract:

a. Salaries, wages, overtime and travel expenses of its employees and a proper proportionate share of vacation pay, separation pay, and other charges or expenses under employee welfare and other plans, all in accordance with Appendix "A" of this contract, hereto attached and made a part hereof; it being expressly understood and agreed that said Appendix may be modified in any respects or manner from time to time by mutual written agreement of the Commission and the Contractor without the execution of an amendment to this contract. In case the full time of an employee is not applied to the Contractor's undertakings hereunder, reimbursement shall be proportioned to the actual time applied thereto.

b. Payments in accordance with agreements respecting employees of other employers loaned for and engaged in the performance of the Contractor's undertakings hereunder; provided, however, that such agreements shall be subject to the approval of the Commission.

c. Overhead costs. To accomplish reimbursement of these costs the Contractor shall receive provisionally the estimated amount thereof for each calendar month. Within thirty (30) days after (i) expiration of each July and January during the period of work performance under this contract and (ii) expiration or termination of such period of work performance, the Commission and the Contractor shall review the overhead costs incurred prior to the commencement of the pertinent thirty (30) day period and not previously so reviewed, and shall negotiate in good faith to agree upon a firm lump-sum amount covering all overhead costs for the period then reviewed. After each negotiation the agreement or agreements reached, if any, shall be incorporated in a supplemental agreement or agreements to this contract; provided, however, that after the commencement of negotiations and in the absence of the execution and delivery of a supplemental agreement or agreements covering all items for negotiation, either the Commission or the Contractor may give written notice to the other that it considers a reasonable time for agreement has elapsed with respect to the item or items for negotiation as to which a supplemental agreement has not been executed and delivered, in which event, upon expiration of ten (10) days after the giving of said notice without the execution and delivery of a supplemental agreement covering any item or items for negotiation, a dispute shall be deemed to exist as to the item or items for negotiation, if any, not then covered by supplemental agreement and shall be resolved in accordance with Article VIII hereof.

In the negotiations for, and in the disposition of the dispute, if any, as to each firm lump-sum amount, the experienced overhead costs to be reviewed shall be treated in accordance with generally accepted accounting principles consistently applied; provided, however, that Appendix "B" of this contract, hereto attached and made a part hereof, sets forth examples of items of cost which shall not be deemed to be reimbursable under this subdivision c or any other subdivision of paragraph 2 of this Article. Any excess payment received by the Contractor for any period reviewed shall be applied by the Contractor in reduction of the Government cost of the contract work or refunded to the Government, as the Commission directs. Any deficit in payment to the Contractor for any period reviewed shall be promptly paid to the Contractor by the Government.

d. Materials, supplies, tools, machinery, equipment, other articles, (including processing and testing thereof by others), fuel and utilities; and services not covered by subdivisions a, b or c of this paragraph 2; provided, however, that in its performance hereunder the Contractor may from time to time, with the approval of the Commission, set aside at the site of the work hereunder for use, and thereafter use for such purpose, any materials of the nature of those manufactured by it in the ordinary course of its commercial business, in which event and in each instance, (i) the Commission and the Contractor shall, in advance of such setting aside, agree in writing, without the execution of an amendment to this contract, upon a unit price or prices for such materials, (ii) such unit price or prices may include profit, (iii) such materials shall, before use, be subject to inspection, and rejection or acceptance, by the Commission and the Contractor shall, at its own non-reimbursable cost and expense, remove all such rejected materials from the site of the work, (iv) title to such of said materials as are so accepted shall vest in the Government at the time of acceptance, and (v) the costs and expenses of manufacturing such rejected and accepted materials and delivering same to the site of the work shall not be reimbursable hereunder, and (vi) the amount or amounts arrived at by respectively applying the above-mentioned agreed unit price or prices to the quantity or quantities of materials so set aside and accepted shall be deemed to constitute the reimbursable costs and expenses hereunder with respect to such accepted materials and to constitute full payment therefor.

e. Training personnel.

f. Subcontracts.

g. Transportation, loading, unloading, demurrage, storage charges, crating, packing, local and long distance telephone calls, facsimile and teletype messages, telegrams, cablegrams, radiograms and postage.

h. To the extent approved by the Commission, (i) procuring or endeavoring to procure personnel and (ii) expediting the production by others, and transportation, of items of personalty.

i. Such bonds and insurance policies (i) required by law, and/or (ii) approved or required by the Commission.

j. Payments made by the Contractor under the Social Security Act (employer's contribution) and any disbursements which the Contractor may be required by law to make on account of this contract on or for any plant, equipment, process, organization, materials, supplies, services or personnel or on moneys received as reimbursement therefor; and, if approved by the Commission in advance, permit and license fees and royalties on patents used, including those owned by the Contractor. The license fees and royalties so approved on Contractor-owned patents shall be deemed to be reimbursable costs and expenses hereunder to the extent that same accrue under such approval.

k. Special audits of accounts and special reports for the Government in connection with performance hereunder.

l. Rentals paid, at rates and on terms approved by the Commission, for the use or occupancy of premises, tools, equipment, machinery, other articles and facilities; repairs thereto not included in the rental; and alterations thereto approved by the Commission.

m. Disbursements incident to payment of payrolls including, but not limited to, the cost of disbursing cash, guards, cashiers and paymasters. If payments to employees are made by check, facilities for cashing checks may with Commission approval be provided without expense to employees, and the Contractor will be reimbursed therefor.

n. Costs and expenses of litigation by, against, or otherwise with, third parties arising out of performance of this contract, including judgments and court costs, reasonable attorneys' fees for private counsel when the Government does not furnish Government counsel, settlements made with the approval of the Commission, and allowances rendered or awarded in connection with suits for wages, overtime or salaries.

o. Losses or expenses not compensated by insurance or otherwise (including settlements made with the approval of the Commission) sustained by the Contractor, and found and certified by the Commission to be just and reasonable or determined by due process of law.

p. The cost of re-working items covered by paragraph 2 of Article I hereof which do not conform to the technical specifications therefor, provided such re-working is not due to wilful misconduct or failure to exercise good faith on the part of a corporate officer of the Contractor or of the Project Director mentioned in paragraph 4 of Article IV hereof.

q. To the extent approved by the Commission, the cost of items delivered subsequent to December 31, 1948, under purchase orders made by the Contractor pursuant to Government Contract No. W-22-075-eng-11 or Government Contract No. AT-30-1-Gen-155 and not reimbursed under either of said contracts. Said items shall be deemed to have been purchased by the Contractor under this contract.

r. Such other costs or expenses not expressly excluded by other provisions of this contract as should, in the opinion of the Commission, be included in the Government cost of the work.

3. Payment of Consideration. Once a month, or in the discretion of the Commission at more frequent intervals, the Government, without duplication, will reimburse the Contractor for its reimbursable costs and expenses hereunder and will pay the Contractor the fixed-fees earned hereunder, upon submission to and approval by the Commission of vouchers therefor supported by such evidence as the Commission may require.

4. Commission Obligation, etc. The Commission has obligated for this contract, from obligational authority available to the Commission, the sum of Five Hundred Thirty Eight Thousand Two Hundred Fifty Dollars (\$538,250.00). The Commission may increase said obligation, in its discretion, from time to time, by written notice to the Contractor. The Contractor shall promptly notify the Commission in writing whenever it is indicated that the Commission obligation for this contract is insufficient, and said notice shall contain, in reasonable detail, the Contractor's estimate of the amount of such insufficiency. When and if, (i) the fixed-fees earned by the Contractor hereunder, whether or not paid, (ii) the Contractor's reimbursable costs and expenses hereunder, whether or not reimbursed,

(iii) the actual or estimated amount unpaid by the Contractor, and reimbursable hereunder when paid, upon all subcontracts, purchase orders and other commitments made pursuant hereto on the assumption that those incomplete will be completed, and (iv) the estimated payroll and overhead costs for the ensuing fifteen (15) day period reimbursable hereunder when paid, shall equal the amount arrived at by deducting \$5,000.00 from the then current Commission obligation for this contract, the Contractor may, by written notice to the Commission, terminate performance of work hereunder in whole if the Commission shall have failed within fifteen (15) days after receipt of a prior written notice of indication of insufficiency of the Commission obligation for this contract, to equalize such obligation and the aggregate agreed compensation (estimated to the extent necessary) covering performance of all work under this contract. Notwithstanding any other provisions of this contract, the total liability of the Government under this contract shall be limited to the Commission obligation specified in this paragraph as the same may have been increased pursuant to the provisions of this paragraph.

5. Advance Payments.

a. The Government shall advance to the Contractor such interest-free sum or sums for use as hereinafter in this paragraph 5 provided, and the Contractor shall repay to the Government such part of the aggregate sum theretofore so advanced, as the Commission and the Contractor may mutually agree upon from time to time in writing without the execution of an amendment of this contract. The aggregate sum theretofore so advanced, less the portion thereof theretofore repaid by the Contractor to the Government, at any given time, is hereinafter referred to as the "advance payment".

b. The terms of this contract shall be considered adequate security for the advance payment; provided, however, that as a condition precedent to the making of any advance under this paragraph 5, the Contractor shall furnish to the Government such additional security as the Commission may prescribe; and provided, further, that if at any time the Commission deems the then security inadequate, the Contractor shall furnish to the Government such additional security, in the form of a surety bond or bonds, as is satisfactory to the Commission.

c. Until the advance payment is liquidated, all funds received as advances under this contract, together with all funds received pursuant to paragraph 2 of this Article, shall be deposited in a special bank account or accounts at a member bank or banks of

the Federal Reserve System of any "insured" bank within the meaning of the Act creating the Federal Deposit Insurance Corporation (Act of August 23, 1935; 49 Stat. 684) as amended (12 U.S.C. 264) separate from the Contractor's general or other funds. Such special bank account or accounts shall be designated so as to indicate clearly to the bank their special character and purpose, and the balance in such account or accounts shall be used by the Contractor exclusively as a revolving fund for performing its undertakings under this contract and not for any other business of the Contractor. Any balances from time to time in such special account or accounts shall at all times secure the repayment of the advance payment, and the Government shall have a lien upon such balances to secure the repayment of such advance payment, which lien shall be superior to any other lien upon such account or accounts; provided, that the bank shall be under no liability to any party hereto for the withdrawal of any funds from said special accounts upon checks, properly indorsed and signed by the Contractor, except that after the receipt by the bank of written directions from the Commission the bank shall act thereon and be under no liability to any party hereto for any action taken in accordance with the said written directions. Any instructions or written directions received by the bank in due course upon U.S. Atomic Energy Commission stationery and purporting to be signed by, or by the direction of, the Commission shall, insofar as the rights, duties, and liabilities of the bank are concerned, be conclusively deemed to have been properly issued and filed with the bank by the Commission.

d. The advance payment, together with funds received pursuant to paragraph 1 of this Article, shall at no time exceed the then total Commission obligation for this contract, and any such excess shall be immediately repaid by the Contractor to the Government, or, if any payment or reimbursement is due from the Government to the Contractor, shall be deducted therefrom. Moreover, if at any time, in the opinion of the Commission, the unliquidated balance of the advance payment exceeds the amount necessary for the current needs of the Contractor, the amount of such excess shall, upon demand by the Commission, be promptly repaid to the Government.

e. If upon (i) expiration of the period of work performance under this contract or (ii) termination of such work performance in whole pursuant to Article III hereof, the advance payment has not been fully liquidated, the unliquidated balance of the advance payment shall be deducted from any payments or reimbursements otherwise due the Contractor under this contract; and if the sum or sums due the Contractor be insufficient to cover such balance, the deficiency shall be paid by the Contractor in cash forthwith after demand and

final audit by the Commission of all accounts respecting this contract; provided, however, that such deduction shall not be made prior to such final audit unless, and then only to the extent that, the Commission determines that such action is reasonably required in order to secure the eventual repayment in full to the Government of the unliquidated advance payment. In the event of cancellation or termination of this contract because of the fault of the Contractor, the Contractor, notwithstanding any ultimate rights that it may have to payments or reimbursements under this contract, shall repay to the Government, upon demand, without setoff of any sums alleged to be due the Contractor, the unliquidated balance of the advance payment. If any demand made in accordance with this subparagraph e is not met upon receipt of such demand by the Contractor, the amount demanded will bear interest at the rate of six per cent (6%) per annum from the date of the receipt of the demand until payment is made; provided, however, that such payment of interest is hereby waived as to any sum repaid by the Contractor within fifteen (15) days after the amount becomes due. If and when the Contractor has, by means of deductions or otherwise, reimbursed the Government in full for advances made, any money remaining in the special bank account or accounts shall be free and clear of any lien under this paragraph 5 and the bank or banks concerned shall have authority to pay same to the Contractor.

f. The Contractor shall, at all reasonable times, afford to the Commission proper facilities for the inspection and audit of the Contractor's accounts, and the Contractor hereby agrees that the Commission may, so far as the Contractor's rights are concerned, during business hours, inspect and make copies of any entries in the books and records of the bank or banks relating to the said special account or accounts.

g. Subject to the approval of the Commission, the Contractor may make payments to subcontractors and materialmen in advance out of said special account or accounts, for labor or services, or to pay for materials in advance of delivery at the site of the work or at an approved storage site. Such sub-advances shall not exceed thirty per cent (30%) of the subcontract price or estimated cost, as the case may be, and the subcontractor or materialmen to whom such advances are made shall furnish adequate security therefor. Unless other security approved and required by the Commission is furnished, covenants in subcontracts or purchase agreements expressly made for the benefit of the Government, providing for a sub-special account with Government lien thereon and for a Government lien on or title to property, tangible or intangible, purchased from the special account, and imposing upon the subcontractor or materialmen

substantially the same rights as are provided herein between the Government and the Contractor, shall be deemed minimum adequate security for such sub-advances..

h. Any assignment of monies due or to become due under this contract shall be subordinate to the rights or claims of the Government arising under this contract by virtue of the advance payment or otherwise.

ARTICLE III - TERM, TERMINATION AND EXPIRATION

1. The period of performance of the work under this contract shall commence on the 1st day of January, 1949, and shall end on the 31st day of July, 1950; provided, however, that as to the work covered by paragraph 2 of Article I hereof, such period shall end on the 31st day of January, 1950.

2. a. The performance of work under this contract may be terminated by the Government under this Article in whole, or from time to time in part, whenever the Commission, for any reason other than default in performance of the Contractor's undertakings under this contract, desires to terminate, in which event the termination shall be deemed to be for the convenience of the Government. Such termination by the Government shall be effected by delivery of a written notice specifying the extent to which performance of work under the contract shall be terminated and the time when such termination shall be effective.

b. Termination by the Contractor pursuant to the provisions of paragraph 4 of Article II of this contract shall be deemed to be a termination in whole pursuant to this Article.

3. Such termination by either party shall be without prejudice to any claims which either party may have against the other. Except as otherwise directed by the Commission, the Contractor shall take the following action after a notice of termination has been given in accordance with this Article: (a) discontinue the terminated work at the time specified in the notice of termination; (b) place no further orders or subcontracts for services, supplies, materials, equipment, articles or facilities for performance of terminated work; (c) proceed to the best of its ability to terminate all orders and subcontracts to the extent that they relate to the terminated work; (d) assign to the Government, in the manner and to the extent directed by the Commission, all the right, title and interest of the Contractor under the terminated portion of the orders and subcontracts so terminated; (e) settle, with the approval or ratification of the Commission, all subcontracts, obligations, commitments, liabilities and claims related

to the terminated work, the cost of which would be reimbursable in accordance with the provisions of this contract; (f) continue performance of such part of the contract work as shall not have been terminated; and (g) take such other action with respect to the terminated work (1) as may be required under other Articles of this contract, and (2) subject to the approval or ratification of the Commission, as may be otherwise appropriate, including but not limited to, action for the protection and preservation of Government property.

4. In the event of any termination pursuant to this Article, the Contractor's costs and expenses arising out of performance in the close-out of the terminated work, reimbursable in accordance with Article II hereof, shall be deemed to include, in each instance, those items incidental to the termination, such as but not limited to, legal, accounting and clerical costs or expenses, which are approved or ratified by the Commission; and in the event such termination is in whole, the fixed-fees hereunder shall be prorated to and including the effective date of termination.

5. In the event of expiration of the period of work performance hereunder without prior termination thereof, the Contractor shall take such action with respect to the contract (a) as may be required under other Articles of this contract and (b), subject to the approval or ratification of the Commission, as may be otherwise appropriate, including but not limited to, action for the protection and preservation of Government property.

6. The obligation of the Government to make any of the payments or reimbursements provided for under Article II of this contract shall, in the event of (a) termination in whole pursuant to this Article or (b) expiration of the period of work performance without prior termination thereof, be subject to any unsettled claims in connection with this contract which the Government may have against the Contractor.

7. Any other provisions of this contract to the contrary notwithstanding, the Contractor and the Commission may agree upon the whole or any part of the amount or amounts which the Contractor is to receive upon and in connection with (a) any termination pursuant to this Article or (b) expiration of the period of work performance without prior termination thereof. Any agreement so reached shall be evidenced by a supplemental agreement to this contract which shall be final and binding upon the parties with regard to their respective claims against each other concerning this contract except as therein otherwise expressly provided.

ARTICLE IV - SPECIAL REQUIREMENTS

1. Subcontracts and other Commitments. The Contractor shall not subcontract any part of the work it is obligated to perform under this contract except as authorized in writing by the Commission. The Contractor shall reduce to writing, unless this provision is waived in writing by the Commission, every subcontract or other commitment in excess of One Hundred Dollars (\$100.00) made by it for the purpose of the undertakings hereunder, except contracts covering the employer-employee relation; insert therein a provision that such commitment is assignable to the Government; insert therein all other provisions required by law and/or expressly required by the provisions of this contract; and make all such commitments in its own name and not bind or purport to bind the Government or the Commission thereunder. No purchase in excess of Five Hundred Dollars (\$500.00) shall be made or placed without the prior approval of the Commission.

2. Discounts, etc. The Contractor shall, to the extent of its ability, take all cash and trade discounts, rebates, allowances, credits, salvage, commissions, and bonifications, and when unable to take advantage of such benefits it shall promptly notify the Commission as to the reason therefor. In determining the reimbursable amount for items procured for the purpose of this contract, there shall be deducted from the gross cost thereof all cash and trade discounts, rebates, allowances, credits, commissions, and bonifications which have accrued to the benefit of the Contractor or would have so accrued but for the fault or neglect of the Contractor.

3. Revenue. All revenue received by the Contractor from its operations hereunder, other than its compensation under this contract, shall be accounted for by the Contractor and, except as otherwise directed by the Commission, shall be applied in reduction of the Government cost of the work.

4. Project Director. The contract work shall be under the direction of a Project Director approved by the Commission who may be a corporate officer of the Contractor; provided, however, that the foregoing shall not be deemed to preclude substitution of one person for another as Project Director with Commission approval.

5. Except as otherwise directed by the Commission in writing, the Contractor shall:

a. Compliance with Laws, etc. Procure all necessary permits and licenses; obey and abide by all applicable laws, regulations, ordinances and other rules of the United States of America, of the

State, territory, or political subdivision thereof wherever the work is done, or of any other duly constituted public authority.

b. Certain Approvals. Obtain the approval of the Commission before (i) purchasing motor vehicles, (ii) leasing, purchasing, or otherwise acquiring real property, (iii) purchasing any item covered by Government mandatory Treasury Schedules and similar schedules and contracts, (iv) constructing, altering or restoring any building or other structure, whether above or below ground, where the estimated cost of the particular program exceeds \$500.00, or (v) installing equipment where the estimated cost of the equipment included in any particular program plus the estimated installation cost thereof exceeds \$500.00, for the cost of any of which reimbursement will be claimed hereunder.

c. Contractor's Representative. At all reasonable times keep at the site or sites of the work a duly appointed and qualified representative who shall receive, and acknowledge receipt, in the Contractor's behalf, of such notices, directions, requests and instructions as the Commission may give pursuant to the terms of this contract. Said representative may or may not be the Project Director provided for in paragraph 4 of this Article.

6. Labor Disputes. Whenever an actual or potential labor dispute arises in the course of the work under this contract, the Contractor shall immediately inform the Commission of the relevant facts.

7. Bonds and Insurance. Except as otherwise specifically provided, the Contractor shall exert all reasonable efforts to procure and maintain such bonds and insurance policies as (i) required by law, and/or (ii) required or approved by the Commission.

8. Subrogation Exclusion. Unless otherwise directed by the Commission, in every instance where the premium on a bond or insurance policy is reimbursable under this contract, the bond or insurance policy shall contain an endorsement or other recital excluding by appropriate language any claim on the part of the insurer or obligor to be subrogated, on payment of a loss or otherwise, to any claim against the United States.

9. Notice of Claims, Suits, etc. The Contractor shall give the Commission immediate notice in writing of (i) any suit or action filed against the Contractor arising out of the performance of this contract, and of (ii) any claim against the Contractor the cost and expense of which are reimbursable under the provisions of Article II hereof, the risk of which is uninsured or in which the amount sued

for or claimed exceeds the amount of insurance coverage. The Contractor shall furnish immediately to the Commission copies of all pertinent papers received by the Contractor. Insofar as the following shall not conflict with any policy or contract of insurance, the Contractor (1), if required by the Commission, shall authorize representatives of the Government to settle and/or defend any such asserted claim and to represent or take charge of any such litigation affecting the Contractor, and (2), upon request of the Commission, shall do any and all things to effect an assignment and subrogation in favor of the Government of all Contractor's rights and claims, except against the Government, arising from or growing out of such asserted claims, but only to the extent that the Contractor has been reimbursed by the Government for the cost and expense incurred by the Contractor in connection with such asserted claims. In the event the Commission shall determine that the best interests of the Government require that the Contractor initiate or defend litigation in connection with claims by or against third parties arising out of performance of this contract, the Contractor shall proceed with such litigation in good faith.

10. Appendix A. The Contractor shall abide by the provisions of Appendix A of this contract, as the same may be modified from time to time; provided, however, that in the event of conflict between the provisions of said Appendix A and the other provisions of this contract, the latter shall prevail.

11. Security Action. Upon notice from the Commission that such action is considered to be in the interests of the common defense and security, the Contractor shall (i) deny any employee or other person access to the site of any contract undertakings and/or to "restricted data" within the meaning of the Atomic Energy Act of 1946, and/or (ii) dismiss from its undertakings under this contract any employee or other person.

12. Contractor's Accounts and Other Records.

a. The Contractor shall keep and maintain records and books of account showing the cost to it of all items for which reimbursement is authorized under the provisions of this contract and shall accurately record therein its financial transactions hereunder. The system of accounting to be employed by the Contractor shall be subject to the approval of the Commission.

b. The Contractor shall preserve (1) the records and books of account mentioned in subparagraph a of this paragraph 12 and all related memoranda, correspondence and other data, and

(ii) all other records of the Contractor pertaining to this contract, during the period of work performance hereunder and for five (5) years after the time of expiration of such period of work performance or the time of termination on whole of work performance pursuant to Article III hereof, whichever first occurs. The cost of such preservation during said five (5) year period shall not be reimbursable under this contract.

c. The Commission shall at all reasonable times during the entire preservation period provided for in subparagraph b of this paragraph 12, have the right to examine, make copies of, and borrow, the records, books of account and other papers mentioned in said subparagraph b; provided, however, that any such borrowing shall be accomplished without unreasonable interference with the Contractor's business.

ARTICLE V - GOVERNMENT PROPERTY

1. The Government reserves the right to furnish any premises, materials, supplies, equipment, machinery, tools, or services (including communication services), to be used in the performance of the Contractor's undertakings hereunder.

2. Title to all property (including, but not limited to, materials, supplies, equipment, machinery and tools) purchased by the Contractor under this contract and for which it is entitled to direct reimbursement hereunder shall pass directly from the vendor or supplier to the Government at the respective points of delivery thereof to the Contractor.

3. All technical data of whatsoever kind or nature (including, but not limited to, notes, drawings, designs, specifications, reports and memoranda, plus medical and other records pertaining to the health of individuals engaged in performance of the contract undertakings) furnished or prepared by the Contractor pursuant to, or developed in connection with, the Contractor's undertakings under this contract, shall be the property of the Government, subject to the right of the Contractor to retain duplicates thereof; and the Government shall have the right to use said data in any manner and for any purpose without any claim on the part of the Contractor for additional compensation therefor. The Contractor shall have full power to use said retained duplicates for records and/or for its other own purposes to the extent not inconsistent with Article VI hereof subject, however, to the provisions of paragraph 4 of Article VII hereof hereby made applicable to such use.

4. All items of property referred to (i) in paragraphs 1 and 2 of this Article (including products, by-products, work-in-process, salvage, residues, wastage and scrap resulting therefrom), (ii) in paragraph 3 of this Article, and (iii) in the "provided, however," clause of subdivision d of paragraph 2 of Article II hereof, except rejected materials, shall, subject to the provisions of paragraph 6 of this Article, remain the property of the Government and are hereinafter, in this Article, referred to as "Government property".

5. The Contractor (i) shall use Government property only in the performance of its undertakings under this contract, and (ii) shall at any time or times, deliver items of Government property as directed by the Commission.

6. The Contractor may, with the approval of the Commission, (i) transfer or otherwise dispose of items of Government property to such parties and upon such terms and conditions as so approved, or (ii) itself acquire title to items of Government property at prices mutually agreed upon by the Commission and the Contractor without the execution of an amendment to this contract. The proceeds of any such transfer or disposition, and the agreed price of any such Contractor acquisition, shall be applied in reduction of any payments or reimbursements to be made by the Government to the Contractor under this contract or shall otherwise be paid in such manner as the Commission may direct.

7. The Contractor shall, to the extent practicable, cause all items of Government property to be suitably marked with an identifying mark or symbol indicating that the items are the property of the Government. The Contractor shall, at all times and in a manner satisfactory to the Commission, maintain records showing the disposition and/or use of all items of Government property. Such records shall be and remain Government property. The Contractor shall promptly notify the Commission of any loss or destruction of or damage to Government property (but not (i) of any consumption of materials or supplies in the performance of its contract undertakings, or (ii) of lost, destroyed or damaged technical data which are worthless from three standpoints, to wit: monetary, practical, and security). As part of the close-out of this contract, the Contractor shall (i) deliver said property records and (ii) render such Government property accounting, as the Commission directs.

8. Except as otherwise specifically provided, the Contractor shall not be liable for loss or destruction of or damage to Government property in the possession or control of the Contractor in connection

with this contract unless such loss, destruction or damage results from wilful misconduct or failure to exercise good faith on the part of a corporate officer of the Contractor or of the Project Director mentioned in paragraph 4 of Article IV hereof.

9. The Contractor will not maintain for its own benefit or protection any insurance (including self-insurance funds or reserves) that covers loss or destruction of or damage to Government property, except insurance covering its limited liability for Government property under this contract, and will not include or seek reimbursement under this contract for any charge or reserve representing the cost of any insurance mentioned in this sentence. In accordance with the written direction of the Commission, the Contractor will obtain insurance covering Government property, with a loss payable clause providing for payment to the Government.

10. Upon the happening of loss or destruction of or damage to Government property as to which the Contractor is obligated to notify the Commission, the Contractor 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 promptly furnish to the Commission a statement of: (i) the lost, destroyed, and damaged Government property, (ii) the time and origin of the loss, destruction or damage, (iii) all known interests in commingled property of which the Government property is a part, and (iv) the insurance, if any, covering any part or interest in such commingled property. If and as directed by the Commission, the Contractor shall make repairs and renovations of the damaged Government property.

11. In the event the Contractor is indemnified, reimbursed or compensated for any loss or destruction of or damage to Government property, other than as provided in Article II hereof, it shall equitably reimburse the Government. The Contractor shall do nothing to prejudice the Government's rights to recover against third parties for any such loss, destruction or damage and, upon the request of the Commission, shall 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.

12. The Government shall at all times have access to the premises wherein any items of Government property are located.

ARTICLE VI - DISCOVERIES, INVENTIONS, ETC.

1. a. Whenever any invention or discovery is made or conceived by the Contractor, or its employees, in the course of any of

the work under this contract, the Contractor shall furnish the Commission with complete information thereon; and the Commission shall have the sole power to determine whether or not and where a patent application shall be filed and to determine the disposition of the title to and the rights under any application or patent that may result; provided, however, that the Contractor, in any event, shall retain at least a sole (except as against the Government or its account), irrevocable, royalty-free license with the sole right to grant sublicenses, under said invention, discovery, application or patent, such license being limited to the manufacture, use and sale for purposes other than use in the production or utilization of fissionable material or atomic energy. Subject to the license retained by the Contractor, as provided in this paragraph, the judgment of the Commission on these matters shall be accepted as final; and the Contractor, for itself and for its employees, agrees that the inventor or inventors will execute all documents and do all things necessary or proper to carry out the judgment of the Commission.

2. No claim for pecuniary award or compensation under the provisions of the Atomic Energy Act of 1946 shall be asserted by the Contractor or its employees with respect to any invention or discovery made or conceived in the course of any of the work under this contract.

3. Except as otherwise authorized in writing by the Commission, the Contractor will obtain appropriate agreements to effectuate the purposes of paragraphs 1 and 2 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 not have access to technical data.

4. Except as otherwise authorized in writing by the Commission, the Contractor will insert in all subcontracts provisions making paragraphs 1 and 2 of this Article applicable to the subcontractor and its employees.

5. With respect to any patented or unpatented invention, article, design, or method furnished by the Contractor and used in the performance of the work under this contract, the Contractor, at its own non-reimbursable cost and expense, shall hold and save the Government, its officers, agents, servants and employees, harmless from liability of any nature or kind, including costs and expenses incurred, for the use thereof and for the infringement of any Letters Patent (not including liability arising pursuant to Title 35, United States Code, Section 42 as amended, prior to issuance of Letters Patent) occurring in the performance of the work under this contract

or arising by reason of any use or disposal by or for the Government. The Contractor hereby releases the Government, its officers and agents, from any and all claims that it has or may have because of the use by or for the Government, now or in the future, of any of the patented or unpatented methods, designs, or inventions of the Contractor concerned with the work under this contract.

6. The Contractor, for itself, its successors and assigns, agrees to and does hereby grant and convey to the Government an irrevocable, non-exclusive, royalty-free license, in and to any and all inventions, (whether patented or not), secret processes and technical information (such as would normally be contained in reports, standard operating procedures, sketches or drawings) of the Contractor utilized in connection with the performance of the work under this contract, to practice or cause to be practiced by or for the Government, for Governmental purposes, any and all of said inventions (whether patented or not), secret processes and technical information (such as would normally be contained in reports, standard operating procedures, sketches or drawings) in the manufacture, use, and disposition of any article and material and in the use of any method or process. The Government, without waiving or forfeiting any right under this license, shall not be estopped at any time to contest the enforceability of, and raise any defense with respect to, the validity or scope of, or the title to, any patent herein licensed.

ARTICLE VII - MISCELLANEOUS

1. Expert Technical Assistance. When, in the judgment of the Contractor, the complexity and nature of the undertakings are such as to require supplemental expert technical assistance, services or advice in connection with special phases of a highly technical character, the Contractor may, with the approval of the Commission, engage or otherwise obtain such supplemental professional services.

2. Inspection and Reports.

a. The Commission shall have the right to inspect in such manner and at such times as it deems appropriate all activities of the Contractor arising in the course of the undertakings under this contract.

b. The Contractor shall make such reports to the Commission, with respect to the Contractor's activities under this contract, as the Commission may require from time to time.

3. Safety and Accident Prevention. The Contractor shall initiate and take all reasonable steps and precautions to protect health and minimize danger from all hazards to life and property, and shall make all reports and permit all inspections as required by the Commission and shall conform to all minimum health and safety regulations and requirements of the Commission.

4. Security and Disclosure of Information.

a. It is understood that unauthorized disclosure of, or failure to safeguard all, top-secret, secret, confidential and restricted matter that may come to the Contractor or any person under its control in connection with the undertakings under this contract, may subject the Contractor, its agents, employees, and subcontractors to criminal liability under the laws of the United States. See the Atomic Energy Act of 1946 (Public Law 585 - 79th Congress). See also Title 18, United States Code, Secs. 5 and 11, Secs. 791 to 797, both inclusive, Secs. 2381 to 2390, both inclusive, and Sec. 3241; and Title 50, United States Code, Secs. 40 and 42.

b. The Contractor agrees to conform to all security regulations and requirements of the Commission. Except as the Commission may authorize, in accordance with the Atomic Energy Act of 1946, the Contractor agrees not to permit any individual to have access to restricted data until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual and the Commission shall have determined that permitting such person to have access to restricted data will not endanger the common defense or security. The term "restricted data" as used in this paragraph means all data concerning the manufacture or utilization of atomic weapons, the production of fissionable material, or the use of fissionable material in the production of power, but shall not include any data which the Commission from time to time determines may be published without adversely affecting the common defense and security.

c. Except as otherwise authorized in writing by the Commission, the Contractor shall insert in all (i) subcontracts, (ii) written agreements with its employees, (iii) agreements for borrowed personnel, and (iv) agreements pursuant to paragraph 1 of Article VII hereof, under this contract, the provisions of subparagraphs a and b of this paragraph 4.

5. Eight-Hour Law. To the extent only that the Eight-Hour Law of 1912 as amended (40 United States Code 324 - 326) is applicable to this contract, the following provisions shall apply:

a. No laborer or mechanic doing any part of the work contemplated by this contract, in the employ of the Contractor or any

subcontractor contracting for any part of said work contemplated, shall be required or permitted to work more than 8 hours in any one calendar day upon such work at the site thereof, except upon the condition that compensation is paid to such laborer or mechanic in accordance with the provisions of this paragraph. The wages of every laborer and mechanic employed by the Contractor or any subcontractor engaged in the performance of this contract shall be computed on a basic day rate of 8 hours per day and work in excess of 8 hours per day is permitted only upon the condition that every such laborer and mechanic shall be compensated for all hours worked in excess of 8 hours per day at not less than one and one-half times the basic rate of pay. For each violation of the requirements of this paragraph a penalty of Five Dollars (\$5.00) shall be imposed upon the Contractor for each laborer or mechanic for every calendar day in which such employee is required or permitted to labor more than 8 hours upon said work without receiving compensation computed in accordance with this paragraph, and all penalties thus imposed shall be withheld for the use and benefit of the Government. It is understood that the foregoing shall be subject in all respects to applicable exceptions and provisions now or hereafter provided by law.

6. Walsh-Healey Act. To the extent only that the Walsh-Healey Public Contracts Act as amended (41 United States Code 35 - 45) is applicable to this contract, the following provisions shall apply:

a. There are hereby incorporated by reference the representations and stipulations required by said Act and regulations issued thereunder by 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.

7. Convict Labor. The Contractor, in performing the work under this contract, shall not employ any person undergoing sentence of imprisonment at hard labor. This provision shall not be construed to prevent the Contractor or any subcontractor hereunder from obtaining any of the supplies, or any component parts or ingredients thereof, to be furnished under this contract or any of the materials or supplies to be used in connection with the performance of this contract, directly or indirectly, from any Federal, State or territorial prison or prison industry; provided, that such articles, materials or supplies are not produced pursuant to any contract or other arrangement under which prison labor is hired by or employed or used by a private person, firm or corporation.

8. Anti-discrimination.

a. The Contractor, in performing the work under this contract, shall not discriminate against any employee or applicant for employment because of race, creed, color, or national origin.

b. The Contractor agrees that the provision of subparagraph a above will also be inserted in all of its subcontracts. For the purpose of this paragraph, a subcontract is defined as any contract entered into by the Contractor with any individual, partnership, association, corporation, estate, or trust, or other business enterprise or other legal entity, for the performance of a specific part of the work to be performed under this contract; provided, however, that a contract for the furnishing of standard or commercial articles or raw materials shall not be considered as a subcontract.

9. 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.

10. Covenant Against Contingent Fees. The Contractor warrants that it has not employed any person to solicit or secure this contract upon any agreement for a commission, percentage, brokerage, or contingent fee. Breach of this warranty shall give the Government the right to annul the contract, or in its discretion, to deduct from the contract price or consideration the amount of such commission, percentage, brokerage, or contingent fees. This warranty shall not apply to commissions payable by contractors upon contracts or sales secured or made through bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business.

11. Assignment. Neither this contract nor any interest therein or claim thereunder shall be assigned or transferred by the Contractor except with the prior written approval of the Commission.

12. Use of Domestic Articles. Unless the Commission shall determine it to be inconsistent with the public interest, or the cost to be unreasonable, the Contractor, its subcontractors, and all material men or suppliers shall use, in the performance of the work, only such unmanufactured articles, materials and supplies as have been mined or produced in the United States, and only such manufactured articles, materials, or supplies as have been manufactured in the United States substantially all from articles, materials, or supplies, mined, produced or manufactured, as the case may be, in the United States. The provisions of this paragraph shall not apply if the articles, materials, or supplies of the class or kind to be used, or the articles, materials, or supplies from which they are manufactured are not mined, produced or manufactured, as the case may be, in the United States in sufficient and reasonably available commercial quantities and of satisfactory quality.

13. Definitions. As used in this contract:

- a. The terms "Atomic Energy Commission" and "Commission" shall mean the United States Atomic Energy Commission or its duly authorized representative or representatives.
- b. The phrase "without the execution of an amendment to this contract" shall mean "without the necessity for the execution of an amendment to this contract".
- c. The term "work" shall include related performance hereunder.
- d. All directions, requests, notices, approvals, instructions and authorizations contemplate and require written, rather than oral action.

ARTICLE VIII - DISPUTES

1. Except as otherwise specifically provided in this contract, all disputes concerning questions of fact which may arise under this contract, and which are not disposed of by mutual agreement, shall be decided by a representative of the Commission duly authorized to supervise and administer performance of the undertakings hereunder, who shall reduce his decision to writing and mail a copy thereof to the Contractor. Said decision shall be final and conclusive on the parties hereto, subject to the right of the Contractor to appeal as provided for in the sentence next following. Within 30 days from this mailing, the Contractor may appeal in writing to the Commission, whose written decision thereon, or that of its representative, representatives or board duly authorized to determine such appeal or such an appeal, not including the representative mentioned in the first sentence, shall be final and conclusive on the parties hereto. Pending the decision on any dispute hereunder, the Contractor shall diligently proceed with the performance of its undertakings under this contract. Legal, accounting and consulting fees and related expenses incurred by the Contractor in connection with the submittal of dispute for initial decision and/or for appellate decision under this Article shall not be reimbursable under this contract.

ARTICLE IX - LETTER CONTRACT NO. AT(30-1)-510

1. Letter Contract No. AT(30-1)-510, as amended, is hereby merged with and superseded by this contract.

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

THE UNITED STATES OF AMERICA

BY: UNITED STATES ATOMIC ENERGY COMMISSION

BY: _____

Witnesses as to execution
in behalf of Contractor:

BRUSH BERYLLIUM COMPANY

BY: _____

(Address)

(Title)

(Address)

I, _____, do hereby certify that I am the duly qualified _____ of said Brush Beryllium Company, a corporation; that _____ who signed the foregoing contract on behalf of said Brush Beryllium Company was then _____ of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

IN WITNESS WHEREOF, I have hereunto affixed my hand and the seal of said corporation, this _____ day of _____, 1949.

(Impress corporate seal here)

APPENDIX "A" OF CONTRACT NO. AT(30-1)-510

I. JOB CLASSIFICATIONS - SALARY AND RATE RANGES

<u>CLASSIFICATION</u>	<u>Monthly</u>	<u>RANGE</u> <u>Salary Range</u>
Director of Development		\$1100 - \$1400
Technical Assistant to Director of Development		500 - 650
Administrative Assistant to Director of Development		450 - 550
Secretary to Director of Development		250 - 350
Stenographer		175 - 250
Chief Engineer, Laboratory Development (Beryllium)		500 - 650
Chief Engineer, Laboratory Development (Zirconium)		500 - 650
Chemical Engineer		400 - 500
Metallurgist		400 - 500
Junior Engineer		300 - 400
Engineering Assistant		250 - 325
Chief Chemist and Laboratory Supervisor		375 - 475
Assistant Chief Chemist		265 - 350
Senior Analyst		250 - 325
Junior Analyst		225 - 275
Laboratory Technician		185 - 235
Laboratory Assistant		175 - 225
Manager of Operations		600 - 800
Project Engineer		350 - 475
Maintenance and Construction Engineer		350 - 475
Junior Project Engineer		300 - 375
Field Representative		300 - 375
Patent Engineer		450 - 600
Draftsman		250 - 350
Operations Foreman		325 - 400
Machine Shop Foreman		325 - 400
Inventory and Stock Control Clerk		300 - 375
Health Supervisor		225 - 285
Shipping, Receiving and Stockroom Supervisor		250 - 315

<u>Hourly</u>	<u>Rate Range</u>
Maintenance and Construction Foreman	\$1.60 - \$1.80
Die and Tool Maker	1.70 - 2.00
Machinist	1.50 - 1.80
Combination Welder	1.60 - 1.85

(\$250 - \$325 monthly rate applies to position of combination welder-machinist in Laboratory Development Program)

(Job Classifications - Salary and Rate Ranges continued)

<u>CLASSIFICATION</u>	<u>Hourly</u>	<u>Rate Range</u>
Gas Welder		\$1.45 - \$1.70
Arc Welder		1.45 - 1.70
Electrician		1.50 - 1.80
Electrical Helper		1.35 - 1.55
Maintenance Mechanic		1.40 - 1.65
Maintenance Mechanic Helper		1.35 - 1.55
Furnace Operator		1.50 - 1.75
Machine Operator		1.40 - 1.65
Janitor		1.10 - 1.30
X-Ray Technician		1.30 - 1.65
First Aid Attendant		1.15 - 1.40

II. JOB DESCRIPTIONS

MONTHLY

Director of Development - Plans, proposes, and directs developmental program, the manner of undertaking projects, and the methods to be employed. Coordinates technical progress of program. Directs general acquisition of facilities and the expenditure of funds. Reviews and summarizes in report form the conclusions, findings, and progress of program. Selects key staff personnel.

Technical Assistant to Director of Development - Is responsible to Director for performance of specific program technical duties to which assigned, and in particular for the preparation of progress reports. Functions so as to relieve Director of technical detail.

Administrative Assistant to Director of Development - Coordinates and executes administrative functions and policies pertaining to developmental program. Establishes and administers controls for accountability of program funds, equipment, facilities, supplies, etc. Is responsible to Director and functions so as to relieve him of non-technical administration.

Secretary to Director of Development - Performs general office work, primarily of a confidential nature, relieving Director of Development of minor executive and clerical duties. Takes dictation and transcribes dictation by use of typewriter. Makes appointments for Director of Development and reminds him of them. Handles personal and important mail. Answers and makes phone calls. May assume additional responsibilities such as preparation of less important correspondence, etc.

Stenographer - Takes dictation in shorthand of correspondence, reports, and other matter and transcribes dictated material, using a typewriter. May be required to be versed in technical language and terms used in the field of chemistry.

Chief Engineer, Laboratory Development (Beryllium) - Is directly responsible to Director of Development for supervising technical phases of laboratory development. Directs and coordinates the work of laboratory engineers, metallurgists, etc. Personally conducts or supervises the conduct of each developmental project.

Chief Engineer, Laboratory Development (Zirconium) - Is directly responsible to Director of Development for supervising technical phases of laboratory development. Directs and coordinates the work of laboratory engineers, metallurgists, etc. Personally conducts or supervises the conduct of each developmental project.

Chemical Engineer - Executes various phases of development program under supervision of Chief Engineer, Laboratory Development. Prepares reports based on findings. May have indirect supervision of other semi-technical personnel.

Metallurgist - Is responsible for performing developmental work and investigation on the treatment and properties of metals and alloys. May operate metallographic or x-ray equipment. Prepares reports based on findings.

Junior Engineer - Assists and is responsible to Chief Engineer, Laboratory Development, for execution of various phases of development program.

Engineering Assistant - Assists in developmental work and performs various duties such as installation, maintenance and operation of motors, pumps, furnaces, etc., under direct supervision of Chief Engineer, Laboratory Development.

Chief Chemist and Laboratory Supervisor - Is directly responsible to Director of Development for supervision of analytical laboratory. Directs chemical analyses and investigation and development of analytical procedures to determine composition of inorganic compounds or mixtures; directs investigations to ascertain physical and chemical properties of raw materials, intermediate and finished products. Furnishes technical chemical advice to development organization personnel.

Assistant Chief Chemist - Assists chief chemist and laboratory supervisor in all phases of duties pertaining to operations and functions of the analytical laboratory.

Senior Analyst - Is directly responsible to Laboratory Supervisor for performing analytical investigations and development with a minimum of instruction.

Junior Analyst - Is directly responsible to Laboratory Supervisor for carrying out analytical procedures in accordance with specific instructions.

Laboratory Technician - Is directly responsible to Laboratory Supervisor for performance of various routine laboratory duties.

Laboratory Assistant - Functions as a helper to all laboratory personnel in accordance with supervisor's instructions. Maintains inventory of chemicals and glassware and keeps simple equipment in condition for laboratory use.

Manager of Operations - Is responsible to Director of Development for control and general supervision of all plant operations which include the following functions: Fluoride reduction and metal separation; fluorination treatment of Beryllium Oxide and Beryllium Hydroxide; metal powder production; metal powder fabrication; machine shop; plant maintenance and construction; inventory and stock control; inplant and outplant industrial hygiene.

Coordinates work of these operations, regulates production, promotes employees and performs other administrative and supervisory duties to insure efficient operation. May personally conduct or supervise the conduct of a particular operation.

Project Engineer - Supervises a group of workmen engaged chiefly on one project; interprets blueprints, sketches, and written or verbal orders. Determines procedure of work. Assigns duties to subordinates and inspects their work for quality and quantity. Maintains harmony among workers. May keep time, production and other clerical records. May assist subordinates during emergencies or as a regularly assigned duty. Is responsible for the performance of these duties to Manager of Operations.

Maintenance and Construction Engineer - Is responsible to Manager of Operations for Plant Maintenance and Construction and general supervision of employees such as welders, maintenance mechanics, and helpers, electrical personnel, janitors, etc. Interprets blueprints, sketches, and written or verbal orders. Determines procedure of work. Assigns duties to subordinates and inspects their work for quality and quantity. Maintains harmony among workers. May assist subordinates during emergencies or as a regularly assigned duty.

Junior Project Engineer - Performs similar duties to Project Engineer, but is not vested with as much responsibility. Is directly responsible to Manager of Operations or Project Engineer.

Draftsman - Prepares clear, complete, and accurate working plans, and detail drawings, from rough or detailed sketches or notes for developmental or construction purposes, according to specified dimensions. Uses knowledge of various machines, engineering practices, mathematics, building materials, and other physical sciences. Is responsible to Manager of Operations or Maintenance and Construction Engineer.

Operations Foreman - Is directly responsible to Project Engineer or Maintenance and Construction Engineer for supervision of a small group of workmen engaged chiefly on one project; interprets written or verbal orders. Inspects work of subordinates for quality and quantity. Keeps time, production and other clerical records. May assist subordinates during emergencies.

Machine Shop Foreman - Is responsible to Manager of Operations for supervising a group of machinists performing work as outlined in job description of that occupation.

Inventory and Stock Control Clerk - Is responsible to Manager of Operations for perpetual inventory and stock and analytical control of materials, etc. required by development program.

Health Supervisor - Renders first aid and subsequent treatment to ill or injured employees; sterilizes, disinfects and bandages minor cuts and burns; may apply artificial respiration; maintains health records; procures inplant and outplant air samples as required; is responsible for performance of above duties to Manager of Operations.

Field Representative - Is responsible to Assistant Vice President for calling on actual or potential customers. Must be technically familiar with all Company products and capable of offering suggestions in uses of these products. Performs other duties as assigned. (Note: It is only by way of special assignment that such representative ties in with the Development Program and then only on infrequent and limited occasions.)

Patent Engineer - Prepares patent disclosures and records of invention and submits same to government. Makes frequent checks on development program work and on notebooks covering work done. (Note: Title of such person is "Ceramics Department Superintendent". Functions as Patent Engineer insofar as his time is required on above described duties.)

Shipping, Receiving and Stockroom Supervisor - Is responsible to Manager of Operations for efficient operation of shipping and receiving department. Is also responsible for all materials and

supplies stocked and for efficient operation of stockroom. Supervises hourly rate employees of shipping and receiving department and of stockroom.

HOURLY

Maintenance and Construction Foreman - Supervises welders, electricians, electrical helpers and maintenance mechanics. Interprets blueprints, sketches, written and verbal orders; determines procedure of work, assigns duties to subordinates and inspects work for quality and quantity; may keep time, production or other clerical records; may assist subordinates during emergencies or as a regularly assigned duty. Is responsible to Maintenance and Construction Engineer.

Die and Tool Maker - Specializes in construction, repair, and maintenance of dies, machine shop tools, jigs, fixtures, and instruments, operating various machine tools and performing other highly skilled work, such as laying out, fitting, and assembling parts. Is responsible to Machine Shop Foreman or Project Engineer.

Machinist - Carries through to completion the construction and/or repair of various kinds of metal parts, tools and machines. Understands blueprints and written specifications. Operates various types of machine tools, possesses knowledge of shop mathematics, the use of charts and tables, the efficient planning of shop work. Must be familiar with working properties of metals and should be capable of shaping metal parts to precise dimensions within tolerances prescribed. Is responsible to Machine Shop Foreman for performance of these duties.

Combination Welder - Capable of operating both electric and gas welding apparatus as outlined in job descriptions of arc welder and gas welder. Is responsible to Maintenance and Construction Engineer.

Gas Welder - Welds metal parts together by means of gas torch and welding rods to fabricate metal shapes or articles or to repair broken or cracked metal objects. Is responsible to Maintenance and Construction Foreman.

Arc Welder - Welds metal parts together by means of electrical welding apparatus to fabricate metal objects or to repair broken or cracked objects, or employs electric welding apparatus to increase the size of metal parts. Is responsible to Maintenance and Construction Foreman.

Electrician - Lays out, installs and maintains a wide variety of complex electrical equipment such as involved automatic-controls, generating equipment and large switchboards; establishes secondary

distribution centers, balances loads, wires circuits having a large number of units and connections. Diagnoses and remedies any electrical trouble. Works from wiring diagrams and schematic drawings. Is responsible to Maintenance and Construction Engineer.

Electrical Helper - Lays out, installs and maintains a variety of ordinary electrical equipment such as motors, lighting circuits and starters. Wires fairly complicated circuits, diagnoses and remedies trouble. Works from wire diagrams and schematic drawings. Is responsible to Maintenance and Construction Engineer.

Maintenance Mechanic - Assists in keeping machinery and mechanical equipment in state of good repair. Examines machines for defects in operation; dismantles or partially dismantles machines to gain access to defective parts and removes part by use of various type hand tools; repairs part or obtains replacement part from stock; reassembles machine making necessary adjustments to insure efficient operation. Is responsible to Maintenance and Construction Foreman.

Maintenance Mechanic Helper - Assists maintenance mechanic by performing specific or general duties, usually of lesser skill, such as keeping a worker supplied with materials, tools and supplies. Is responsible to Maintenance and Construction Foreman.

Furnace Operator - Fires, charges, tends, and repairs, gas or electric furnaces in which beryllium metal or beryllium metal alloys are treated. Is responsible to Project Engineer.

Machine Operator - Operates various machines used in projects covered by development program such as hydraulic presses, ball mills, rolling mills, forges, etc.

Janitor - Sweeps and cleans offices, shop areas, and wash rooms. Is responsible to Maintenance and Construction Engineer.

X-Ray Technician - X-rays fabricated parts, etc., when required, makes photographic reproductions. Performs other related duties as assigned.

First Aid Attendant - Is responsible to and assists Health Supervisor in the performance of duties as outlined in the job description for that position. Primary function is to assist in procurement of in-plant and out-plant air samples as required.

III. EMPLOYEE RELATIONS POLICIES, ETC.

PORTAL TO PORTAL PAY

Hourly rate and non-exempt salaried employees whose duties require them to handle or to be continually exposed to chemicals which may be

harmful to the skin are required to take a shower at the end of their work day. For each of these employees a time allowance of 18 minutes is given for this purpose. The employee is reimbursed in the amount of 3/10 of an hour at his regular rate of pay, or, on a time and one-half basis if his total time in the plant then exceeds 8 hours.

JURY DUTY

Employees called for jury duty are paid the difference between the amount of reimbursement received for jury duty, including expenses, if any, and the wages (for a total number of hours not in excess of 40 per week) which would normally be received. In cases where jury service might be required for an extended period of time, the maximum jury time allowance is an administrative prerogative.

SUPPER MONEY

Salaried employees who are not compensated for overtime work will receive an allowance of \$1.25 per meal whenever overtime work is required. Two hours of overtime, exclusive of the supper period, will be the minimum requirement for this allowance.

Employees who are compensated for overtime will not receive an allowance either for the time consumed for supper, or for the meal itself.

REPORTING TIME

In the event an employee reports for work as scheduled without previously having been notified not to report, he shall be given a minimum of four (4) hours' work, or, if no work is available, two (2) hours' pay.

CALL-IN PAY

When an employee reports for work pursuant to call by the company (and such work is not continuously available), the company shall furnish a minimum of four (4) hours' work or four (4) hours' pay, at the employee's straight time day rate. When an employee reports for overtime work pursuant to call by the company after he has left the plant, the company guarantees minimum earnings equal to four (4) hours at a straight time day rate.

OVERTIME

Hourly Rate Employees

Overtime is paid at time and one half the regular rate of pay for:
(1) Hours worked in excess of eight (8) in one work day; or (2) Hours

worked in excess of forty (40) in one work week; or (3) Hours worked at company request in excess of eight (8) in any sixteen (16) consecutive hour period which falls in two different work days. In no case shall there be a duplication of overtime paid by virtue of the time worked falling into more than one of the above classifications.

Non-Exempt Salaried Employees

Overtime is paid at one and one half times the average hourly rate of pay for: (1) Hours worked in excess of eight (8) in one work day; or (2) Hours worked in excess of forty (40) in one work week; or (3) Hours worked at company request in excess of eight (8) in any sixteen (16) consecutive hour period which falls in two different work days. In no case shall there be a duplication of overtime paid by virtue of the time worked falling into more than one of the above classifications.

In the event that a non-exempt salaried employee is granted an excused absence during a work week, that excused absence will be considered as a day worked and any hours worked on Saturday or Sunday at the request of an authorized supervisor shall be considered as "overtime" and paid accordingly even though the actual hours worked may not exceed forty (40).

Exempt Salaried Employees

No overtime pay under any conditions.

TRAVEL ALLOWANCE

Employees traveling on official business in the interest of this contract will be allowed reimbursement as follows:

Actual transportation expense, plus pullman in the event travel is by rail.

Transportation expense via private automobile at the rate of 7¢ per mile plus ferry, bridge, tunnel or toll road charges.

Actual expense for lodging and an allowance of five dollars per day to cover other subsistence expenses during the period of travel.

Other allowable expenses include official telegrams and telephone calls; streetcar and bus fares and taxi fares when public transportation is not practical; checking and handling of baggage.

HOLIDAY PAY

Each hourly rate employee who has completed three months continuous service will be paid for eight hours at his regular rate of pay for New Years Day, Decoration Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day in accordance with the following provisions.

To be eligible for this holiday pay the employee must work on his last scheduled day before the legal holiday and also on his first scheduled day following the legal holiday unless granted excused absence from work on one or both of these scheduled turns prior to the holiday in question.

Those hourly rate employees who may actually work on any of the above holidays shall not actually receive holiday pay but shall be paid double time for the day worked.

Those hourly rate employees who may be on prophylactic layoff as provided in our sick leave policy shall be paid at their regular hourly rate of pay on a holiday instead of the 80% allowance if one of the days to which he is entitled to 80% pay happens to fall on one of the above mentioned holidays.

SEVERANCE PAY

Payment of severance pay to any classification of employee is handled individually and is subject to administrative decision. However, prior to the awarding of any severance pay amounting to more than one-half of an employee's monthly earnings, the approval of the Atomic Energy Commission will be obtained.

TRANSPORTATION, MOVING & SUBSISTENCE ALLOWANCES

Transportation, moving and subsistence expenses incurred by an employee following transfer to new headquarters on temporary or permanent assignment are allowed as follows:

	<u>Transportation Allowance</u>	<u>Subsistence Allowance</u>	<u>Moving Allowance</u>	<u>Remarks</u>
New Employee Applicants	Yes	Yes	If hired.	Refers to highly technical positions. Prior AEC approval required. Actual transportation costs plus \$5.00 per day subsistence.

	<u>Transportation Allowance</u>	<u>Subsistence Allowance</u>	<u>Moving Allowance</u>	<u>Remarks</u>
New Employee and Immediate families	Yes	Yes	Yes	Refers to highly technical positions. Prior AEC approval required. Regular allowances.
Employee and Immediate Family - upon transfer of permanent headquarters.	Yes	Yes	Yes	Costs to be shared. 60% AEC, 40% Contractor.
Former employees who are being rehired.	Yes	Yes	Yes	Costs to be shared. 60% AEC, 40% Contractor. Prior AEC approval required for those who have been separated for more than one year.
Transfer of Employee on temporary assignment.	Yes	Yes	Yes	Costs to be shared. 60% AEC, 40% Contractor.
If temporary assignment is made permanent - employee and immediate family.	Yes	Yes	Yes	Costs to be shared. 60% AEC, 40% Contractor.
Return to point of origin for completion of moving arrangements - new employee or employees whose permanent headquarters are transferred.	Yes - one round trip to point of origin.	Yes	--	Costs to be shared. 60% AEC, 40% Contractor.

Transportation allowances are made for:

Train: First Class Railroad Fare, Pullman Fare, Taxi, Any Public Transportation, Baggage and Baggage Transfer.

Air: Airline fares between Airports, Limousine, Taxi, Any Public Transportation, Baggage and Baggage Transfer.

Private Auto: 7¢ per mile per auto, not to include ferry fares, bridge road or toll charges which will be reimbursed separately.

Subsistence Expenses are allowed to those employees transferred to new permanent headquarters who because of critical housing conditions must temporarily maintain two residences; this expense allowance is approved for the period during which two residences must be maintained, but under no condition for more than 60 working days without prior AEC approval. This expense allowance includes: (1) Actual cost of room rent; (2) Not more than \$2.50 per day to cover food allowance; (3) One round trip weekly to last permanent headquarters; this may be provided or mileage allowance authorized.

Moving expenses include: (1) Packing, crating, and unpacking; (2) Charges for containers; (3) Insurance in transit; (4) Transportation between points of origin and destination; (5) Disconnecting and connecting special pieces of equipment and furniture; and (6) Net cost of change of automobile license plates.

TERMINATION NOTICE

The company will provide, whenever possible, the following minimum notice of layoff because of lack of work.

Salaried Employees: 1/2 Month
Hourly Employees: 7 Days

VOTING TIME

Employees may absent themselves from work for two (2) hours during the time the polls are open on election day without being penalized, if application is made prior to such day, and provided that the company may specify the hours during which the employee may so absent himself.

An employee may serve as an election official on election day providing the company is notified in advance of election of such intention on the part of the employee.

SICK LEAVE

A. Hourly Rate Personnel

Sick leave pay is awarded to hourly rate personnel under the following conditions:

1. Employees incurring an occupational disease are compensated at 80% of their basic hourly rate of pay for a maximum of 40 hours during the first seven days of the occupational disease.
2. Employees suffering an illness diagnosed by the company physician as non-occupational will in some instances be temporarily precluded from work in any capacity. In such cases, the employee is compensated up to a maximum of 80 hours at 80% of his pay, but in no case exceeding 40 hours for any work week.
3. For any day on which an hourly rate employee is sent home following an accident occurring on the job, the employee is paid for 8 hours work on that particular day at his basic hourly rate of pay.

B. Salaried Personnel

Before awarding sick leave pay to any salaried employee in excess of one month, the matter will be referred to the Atomic Energy Commission for approval.

MILEAGE COMPENSATION

Employees using their own cars on company business are compensated at the rate of seven cents per mile regardless of the length of the trip or the weight of materials carried.

A standard rate of \$4.00 has been established as the round trip rate between the Cleveland and Lorain plants.

Employees instructed by the company physician to make a trip to any destination for observation or treatment are reimbursed for cost of public transportation or for use of their own car at the usual rate of seven cents per mile.

CLOTHING ALLOWANCE

A. Cotton Clothing

As a preventive measure against industrial skin diseases, a daily change of work clothing and bath towel is furnished at company expense to all employees of certain departments in both the Lorain and Cleveland plants whose duties require them to handle or be continually exposed to chemicals which may be harmful to the skin. Employees whose duties require them to handle or be exposed to such chemicals only occasionally are furnished only two or three changes of clothing and towels weekly.

Employees who may be sprayed with harmful liquid solution or whose clothing becomes extremely contaminated during their work day may be given additional changes of clothing as required in any one work day and provisions made for the employee to take a shower on company time.

B. Wool Clothing

In departments where sulphuric acid is used in process work wool clothing is necessary. Because of difficulties experienced in obtaining wool clothing and the high cost of such clothing, the policy is to pay one-half the original cost of this clothing and all dry cleaning or laundry costs.

Employees are required to turn in wool clothing for laundry or dry cleaning through the company stockroom.

Daily changes of towels are also furnished employees of these departments.

C. Gloves

Cloth, leather, or rubber gloves are furnished employees at a nominal fee with the company paying the balance of the cost. New gloves are issued as required - again for the nominal fee - upon the return of the used gloves to the stockroom. If the employee is not able to turn in a pair of gloves for exchange, then he is charged the full price for the gloves based upon company cost.

D. Safety Equipment

Each operator or employee is furnished goggles and respirators at company expense, together with all cartridge replacements as required. Sleeve gauntlets, rubber aprons, asbestos coats, hoods, and other specific protective equipment for both laboratory and production employees are furnished at company expense.

GROUP LIFE INSURANCE

Group life insurance is available to all employees after they have completed one month's service with the company. The amount of insurance which each employee may possess depends solely upon his job classification as outlined below:

<u>Classification of Employees</u>	<u>Amount of Insurance</u>
Officers and Plant Managers	\$2,000.00
Department Heads	1,500.00
Research Engineers, Chemists	
Assistant Department Heads	1,000.00
All other Employees	500.00

On each anniversary of an employee's employment following the date the employee becomes insured, he shall be insured for the basic amount of insurance to which he is entitled plus 20% of said basic amount of insurance for each completed full year of continuous active service, but in no event shall the employee receive credit for more than five years of continuous active service with respect to the computation of the amount of additional insurance he may receive under the group policy.

If the employee's classification with respect to his occupation changes, he shall be insured on the date of change in such classification for the basic amount of insurance determined in accordance with such new classification plus 20% of said basic amount for each completed full year of continuous active service, if any.

The cost of this group life insurance is shared by the employer and employee, each employee paying 30¢ per month for each \$500.00 basic insurance to which he is entitled.

MERIT INCREASES AND PROMOTIONS

Merit increases will not exceed 15% per individual per calendar year without the approval of the Atomic Energy Commission. Promotions will be limited to a 15% increase in basic earnings or to the minimum of a new rate range, whichever is higher, unless approval for such promotion is authorized by the Atomic Energy Commission.

SALARY APPROVALS

Salary approvals up to and including \$8,000.00 will be the responsibility of the company. Salaries of more than \$8,000.00 will be submitted to the Atomic Energy Commission for prior approval on Form AEC 37.

VACATIONS

A. Hourly Rate Employees

Hourly rate employees are eligible for one week's vacation with pay after having completed one year's continuous service. Hourly rate employees are eligible for two weeks' vacation with pay after having completed five or more years' continuous service.

Hourly rate employees eligible for vacations are paid at the rate in effect at the time of the beginning of the vacation period and on the basis of 40 hours' pay for each week of vacation granted.

B. Salaried Employees

Any salaried employee becomes eligible for one week's vacation with pay after having completed six months' continuous service.

Any salaried employee becomes eligible for two weeks' vacation after having completed one or more years' continuous service.

Salaried employees granted vacations are paid at the basic salary in effect at the time their vacation period begins.

C. General Provisions

Eligible employees who resign during the vacation period are awarded vacation pay providing they give two weeks' notice of intended termination.

Eligible employees who are laid off during the vacation period are awarded vacation pay.

MILITARY LEAVE

Employees who are members of the National Guard or of a reserve component of the Army, Navy, Marine Corps, or Coast Guard shall be granted temporary military leave when called to active duty and shall be reimbursed in accordance with the following provisions:

1. To be eligible for reimbursement, an employee must have completed at least 12 months' active service with the Company. If, however, 12 months' active service has not been completed, military leave may be granted without reimbursement.

2. If an employee is eligible for reimbursement in accordance with the provisions of Paragraph 1, he will receive \$5.00 per day for each scheduled working day absence because of military leave, but in no case shall his reimbursement exceed \$25.00 in any work week or \$50.00 in any calendar year.

APPENDIX "B" OF CONTRACT NO. AT(30-1)-510

Examples of Items of Non-reimbursable Costs.

Irrespective of whether the particular costs are treated by the Contractor as direct or indirect, the following items of cost are considered non-reimbursable, except as indicated:

- (a) Advertising, except "help wanted" advertising, and advertising in trade and technical journals.
- (b) Amortization or depreciation of (1) unrealized appreciation of values of assets, or (2) assets fully amortized or depreciated on the contractor's books of account.
- (c) Bad debts (including expenses of collection) and reserves for such debts.
- (d) Commissions and bonuses (under whatever name) in connection with obtaining or negotiating for a Government contract.
- (e) Contingency reserves.
- (f) Contributions and donations.
- (g) Dividend payments.
- (h) Entertainment.
- (i) Federal taxes on income and excess profits.
- (j) General research, unless specifically provided for elsewhere in the contract.
- (k) Interest on borrowings (however represented), bond discount and expenses, and financing charges.
- (l) Legal, accounting and consulting services and related expenses incurred in connection with organization or reorganization, prosecution of patent infringement litigation, defense of anti-trust suits, and the prosecution of claims against the United States.
- (m) Losses from sales or exchanges of capital assets, including investments.
- (n) Losses on other contracts.
- (o) Maintenance, depreciation and other costs incidental to excess facilities (including machinery and equipment) other than reasonable standby facilities.

*contractor
not to
include
A-E
on 1/23*

(p) Premiums for insurance on the lives of directors, officers, proprietors or other persons, where the Contractor is the beneficiary directly or indirectly.

(q) Selling and distribution activities not related to the contract products.

(r) Taxes and expenses in connection with financing, re-financing, or refunding operations, including the listing of securities on exchanges.