

BUDGET & REDUCTION PROGRAM

Vol.2-

Vol. 1- Correspondence beginning with 8-3-64 to 9-30-65

Vol. 2- Correspondence beginning with 10-1-65 to

J. A. JONES CONSTRUCTION COMPANY

DIAL EDISON 4-3081

CONTRACTORS



ENGINEERS

P. O. BOX 208
CHARLOTTE 1, N. C.

June 29, 1966

United States Atomic Energy Commission
Washington, D. C. 20545

Attention: Dr. Glenn Seeborg, Chairman

Gentlemen:

Your letter of June 1, 1966 and message from President Johnson emphasizing the importance of cost reduction ideas and the effective use of AEC funds, strikes a responsive chord with the J. A. Jones Construction Company. In this regard I requested our Richland Office to supply me with verified savings to the Government on our Contract AT(45-1) 687 since the advent of our present record program of June 31, 1963.

This record is as follows:

June 31 - December 31, 1963	\$162,000
January 1 - June 30, 1964	105,500
July 1 - December 31, 1964	41,500
January 1 - June 30, 1965	46,387
July 1 - December 31, 1965	473,687
Total Verified Savings	\$829,074

During our many years of association with the AEC we have emphasized to our people the great importance of efficient cost reducing operations. We will continue to pursue this objective vigorously, and we join you and the President in this renewed effort for even greater savings in this program.

Sincerely yours,

J. A. JONES CONSTRUCTION COMPANY

Edwin L. Jones, Jr.
President

ELJJr:cms

99-68-9

Budget - 8 Cost Reduction

Mason & Hanger-
Silas Mason Co., Inc.

ENGINEERS AND CONTRACTORS
FOUNDED 1887

711
Lexington, Kentucky
40507

200 EAST MAIN STREET
606-284-4290
CABLE CODE-MHSMCO

June 29, 1966

Dr. Glenn T. Seaborg, Chairman
United States Atomic Energy Commission
Washington, D. C. 20545

Dear Dr. Seaborg:

Your letter of 1 June 1966 was received with special interest, since it dealt with the subject of Cost Improvement, which I consider of primary importance.

We were particularly impressed by the attached pamphlet entitled "Cost Reduction Notes" published by the Bureau of the Budget for the Exchange of Ideas. The fact that four of the thirty-six ideas for savings were generated from within the AEC Complex is indeed commendable.

The Burlington AEC Plant, operated by the Company for the Commission, was able to save more than 12% of the money expended at the plant over which the Company exercises control. This percentage of savings far exceeded any other ALO Contractor's savings for Fiscal Year 1965. We feel this speaks for itself as an expression of support for the Cost Reduction Program and is an excellent indication that our people are highly motivated and are deeply concerned as to how their tax dollar is utilized.

The emphasis being placed on this program by you and our President can only lead to greater accomplishments, and I want you both to know that you have my wholehearted support.

Sincerely,

Arnold Hanger
Arnold Hanger
President

AH:klh

cc: addressee

L. P. Gise, Mgr. ALO

6-29-66

UNITED STATES GOVERNMENT

Memorandum

Dir
B425
BAF-8
Cost Reduction

TO : Those Listed Below

DATE: June 23, 1966

FROM : *Slaton*
William H. Slaton, Director
Division of Plans and Reports, HQ

SUBJECT: COST REDUCTION - NOMINATIONS FOR PRESIDENTIAL RECOGNITION

Yesterday we sent a telegram to all field offices giving additional information on the cost reduction awards which President Johnson plans to make in July as part of a cost reduction review involving agency heads, Congress and industry. A copy of the memorandum from Mr. Macy and a sample nomination format are attached to give you fuller detail. You are invited to submit nominations for these individual awards to the Division of Plans and Reports by June 27, 1966.

In addition to the award nominations, we are now compiling a preview of AEC's FY '66 cost reduction performance, and field cost reduction coordinators have been asked to supply physical examples of cost reductions by AEC or contractors which could be held up for viewing by the audience and cameras at the review. Ideas for 30" x 40" "before" and "after" type posters are also solicited.

Attachments:
As stated

Addressees:
Field Cost Reduction Coordinators -
J. Durwood Yates, AL
Charles Yax, BH
Fred Matzmüller, CH
Howard S. Oster, Jr., GJ
Robert Scott, ID
Jack Hooker, NV
Herbert Pennington, NY
Frederick Peitzsch, OR
Stuart Platt, PNR
Perry K. Bushnell, RL
James J. King, SAN
Mervyn Palmeter, SNR
Harry Rahner, SR
George L. Kimball, SNPO-Cleveland
John P. Jewett, SNPO-Nevada
Heads of Divisions and Offices, HQ

eg filed - Bureau - 13





UNITED STATES CIVIL SERVICE COMMISSION
WASHINGTON D C 20415

June 22, 1966

MEMORANDUM FOR HEADS OF DEPARTMENTS AND AGENCIES

The President will honor a selected group of Federal employees for their outstanding contributions to the War on Waste at a White House ceremony sometime in July.

I have been asked to invite all executive departments and agencies to submit nominations for this Presidential recognition. A review of available cost reduction and incentive award records should identify the most notable employee achievements that are worthy of consideration. Your nominations will be needed not later than June 30.

The characteristics of potential nominations are as follows:

- The cases should be among your agency's most significant employee ideas or superior achievements which produced cost reduction or cost avoidance results measurable in terms of dollars.
- The proposal of achievement must have been placed into effect or have received management approval during F. Y. 1966.

In the final selection process it is hoped to have a variety of federal personnel represented, for example

- A range of occupations including blue collar, white collar, etc.
- A range of grades
- Coverage of women, military, special groups, etc.
- Geographical distribution

The number of cases we would like to have from your agency is indicated below.

John W. Macy, Jr.
John W. Macy, Jr.
Chairman

Atomic Energy Commission: Up to 5

SAMPLE FORMAT FOR NOMINATIONS OF COST REDUCTION ACHIEVEMENT

Agency :

Name :

Position :

Organization :

Location :

Achievement : (Sample)--Developed new procedures and special tools for rebuilding damaged instruments used on the Nike-Hercules missile. These delicate instruments are used to sense weather factors when the Nike-Hercules missile is in flight. Formerly these instruments were destroyed when damaged since they were considered non-repairable. (Additional details attached)

Benefits : (Sample)--Rebuild of instrument is now being accomplished at a cost of \$38 per unit compared to a cost of \$582 for a new unit. Savings from this achievement totaled \$630,200 in FY 1966. (Additional details attached)

Remarks : (Sample)--A particularly outstanding achievement for an employee of this grade; significantly beyond normal job performance; Superior Achievement Award of \$ _____ granted February 1966.

Date of Birth :

Home Address :

NOTE: Attach readily available biographical material--highlights of education, employment, community activities, etc.--including any available copy of news item from the agency's house organ on the employee's achievement.

(Submit original and 3 copies of this format.)

Subj: Cost Reduction

UNITED STATES GOVERNMENT

Memorandum

TO : Heads of Divisions and Offices, HQ

DATE: *June 16, 1966*

FROM : *Slaton*
William H. Slaton, Director
Division of Plans and Reports

SUBJECT: COST REDUCTION JOURNAL

The Department of Defense has changed the format of its quarterly publication, the "Cost Reduction Journal", which is published to stimulate cost reduction ideas, promote cost consciousness and enhance understanding of efficiency programs. A copy is attached.

The Journal includes articles of interest that may be of value in your cost reduction efforts for the AEC.

In response to requests, we are now selecting for circulation additional material on AEC cost reduction actions and activity. If, while reviewing the attached booklet, ideas for improving AEC's program occur to you, please let us know.

Attachment: *only one copy of attachment*
~~As stated~~ *filed in DC*



THE UNIVERSITY OF CHICAGO
CHICAGO 37 • ILLINOIS
OFFICE OF THE PRESIDENT
5801 SELLIS AVENUE

BAF-8.5
Cost Reduction

4

June 15, 1966

Dr. Glenn T. Seaborg
Chairman
Atomic Energy Commission
Washington, D. C. 20545

Dear Glenn:

Thank you for your letter of June 1, 1966, transmitting a message from the President again emphasizing the importance of cost reduction ideas and actions. Please be assured that we shall continue our best efforts to make all feasible economies in operations conducted under contracts with the Atomic Energy Commission and other agencies of Government.

Your courtesy in providing us with this information is much appreciated.

Sincerely yours,



George W. Beadle
President

6-15-66

10
BAF-8
Cost Reduction

NORTH AMERICAN AVIATION, INC.

GENERAL OFFICES • 3200 EAST IMPERIAL HIGHWAY • EL SEQUOIO, CALIFORNIA

OFFICE OF THE PRESIDENT

June 13, 1966

The Hon. Glenn T. Seaborg
Chairman
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Glenn:

Thanks very much for your letter with which you enclosed President Johnson's message and copies of "Cost Reduction Notes." These copies, in addition to others that we may receive from your field offices, will be distributed by our Cost Reduction Program personnel to appropriate members of our organization.

Since the implementation of our formal Cost Reduction Program, it has been our practice to provide to each operating division of the company descriptions of all cost reducing actions of the other divisions. Copies of such pamphlets as the "Cost Reduction Report" by DOD and NASA's publications "Trim" and "Bits" are also distributed to our divisions. This practice, we feel, does much toward accomplishing the task of deriving maximum benefit from the great wealth of ideas brought to light through our cost reducing efforts. We are confident that it has been a factor in enabling us to report to your Chicago Operations Office over \$5,000,000 in cost reductions for the first two years of your program.

In accordance with your suggestion, ideas generated by personnel of our Atomic International Division which may have significant application for other government agencies will be submitted to you in advance of our periodic formal report.

You may be assured of the continuing attention of North American Aviation to the attainment of the efficiency and economy sought by the President and by you.

Sincerely yours,

Lee

JLAtwood/ph

6-13-66

WACKENHUT SERVICES

INCORPORATED



Budget & Cost Reduction

Furnishing security and safety to government

EXECUTIVE OFFICES
3280 PONCE DE LEON BOULEVARD
CORAL GABLES, FLORIDA
HIGHLAND 5-1481

June 10, 1966

Mr. Glenn S. Seaborg
Chairman
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Seaborg:

This will acknowledge your recent letter transmitting the "Memorandum for the Heads of Departments and Agencies," signed by President Johnson, and the pamphlet entitled "Cost Reduction Notes," along with your most interesting comments concerning the cost reduction participation by AEC contractors.

I wish to emphasize to you that I am personally interested in cost reduction programs which, if properly monitored, always result in immense savings to the American tax payer. In this regard, I wish to relate that Wackenhut Services, Inc. has an integral cost reduction program which effectively operates as a corporate entity. This experience at the headquarters level has been extended to our field and project managers and is closely monitored and evaluated in a timely manner to insure the desired economic results. The AEC "Cost Reduction Program," of which WSI is an active participant, has projected a platform from which our organization has submitted numerous economy and efficiency programs relative to our contractual work at the Nevada Test Site. In reviewing our efforts in this joint program with AEC, I have found much personal satisfaction in the professional manner in which AEC has assumed the obligation to obtain greater efficiency and economy in conjunction with its programs of mutual interest with its contractors.

I have directed my Cost Reduction Project Manager to forward to your office any ideas which may lead to savings in more than one agency or department in advance of the recording of such ideas in the standard Cost Reduction Report. In addition, the pamphlet "Cost Reduction Notes" has been identified as required reading for all my executives and supporting personnel in the field.

I fully expect that I will receive such documentation that will be beneficial to the overall "Cost Reduction Program" which you have so ably pointed out in your recent communication.

Sincerely yours,

G. R. Wackenhut
George R. Wackenhut
President

6-10-66

Budget & Cost Reduction

MONSANTO RESEARCH CORPORATION

600 NORTH LINDBERGH BOULEVARD • ST. LOUIS, MISSOURI 63166

OFFICE OF
HOWARD E. NASON
PRESIDENT

(314) WYBOWE 3-1000

9 June 1966

The Honorable Dr. Glenn T. Seaborg, Chairman
Atomic Energy Commission
Washington, D. C. 20545

Dear Glenn:

Thank you for your letter of the 1st, and for the attached memorandum from the President, with "Cost Reduction Notes". These will be circulated widely at all of Monsanto Research Corporation's operating locations.

I know that you are particularly concerned that every effort be made to achieve significant cost reduction in the operation of Mound Laboratory. In this connection, I believe that you would be interested in some data from our recent reports to Albuquerque Operations Office:

For the period January 1 through June 30, 1965, we accomplished savings of \$904,000. Some of the most significant actions included were: (1) improved management methods to reduce the reject rate of explosive components for a savings of \$136,300; (2) specified or utilized less expensive materials, in which rejected, but functional, detonator components were used for calibrating test firing equipment instead of high quality (WR) components for a savings of \$75,400; and (3) installed a bulk supply system for nitric acid and received this material in tank truck quantities instead of carboy size lots to effect savings of \$124,300.

For the period July 1 through December 31, 1965, we achieved savings of \$615,300. Some of the most significant actions included were: (1) avoided rejection of timers (MC-1600 series) by performing a statistical analysis to prove that these items were functional (and approved by the design agency for acceptance) to effect savings of \$18,200; (2) substituted commercial grade xenon gas for research grade to effect savings of \$25,200; and (3) salvaged and repaired packaging and shipping materials to effect savings of \$53,100.

Cost reduction continues to be an item of concern in our operations, and is being pursued with undiminished vigor. For the period January 1 through January 30 of 1966, 32 new cost reduction actions were taken at Mound Laboratory,

- 2 -

with savings estimated at \$533,100.

You certainly can count on our full cooperation in this important program.

Very sincerely,



H. K. Nason
President

hr

cc: Mr. L. P. Gise, Manager
Albuquerque Operations Office

Mr. D. L. Scott
Mound Laboratory

RECEIVED
JAN 10 1950
U. S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

Budget - 8 - Cost Reduction

5

NATIONAL LEAD COMPANY

115 BROADWAY

NEW YORK, N. Y. 10006

ALFRED H. DREWES
PRESIDENT

June 7, 1966

27

Mr. Glenn T. Seaborg
Chairman
U. S. Atomic Energy Commission
Washington, D. C.

Dear Mr. Seaborg:-

The importance of good cost reduction ideas and actions discussed in your letter of June 1st and the enclosures which accompanied it cannot be over-emphasized. These are matters of constant concern to us, not only in the activities of National Lead Company, but also as contract operators of the feed materials plant at Fernald, Ohio.

The distribution of "Cost Reduction Notes" is a good idea and should prove helpful in our continuing emphasis on improved operating economy.

Sincerely

Alfred H. Drewes
President

6-7-66

UNITED STATES GOVERNMENT

Memorandum

Budget 88 Cost Reduction

Copy - Germantown!

TO : Heads of Divisions and Offices, HQ
Managers of Field Offices

DATE: June 7, 1966

FROM : Acting
General Manager

J. W. Sloch

SUBJECT: COST REDUCTION GOALS

The attached memorandum from President Johnson summarizes how the Government as a whole has done toward meeting Cost Reduction Goals established in July 1965.

Copies of the report summarizing AEC's progress through December 31, 1965, were sent to you on March 9, 1966. It showed that we had made satisfactory progress toward the original goals and, in addition, that we had increased our fiscal year 1966 goals by \$23 million and our fiscal year 1967 goals by \$73 million.

Your final report of accomplishments against FY 1966 goals is due in the Division of Plans and Reports, Headquarters, on August 12, 1966. That report should not be limited to actions specifically contemplated in the establishment of your goals; all savings which qualify within the guidelines of Draft AEC Appendix 0806 should be included.

This has been our first experience with the setting of cost reduction goals. Experience gained should help in preparation of your second report of goals which is due on July 15, 1966.

Attachment:
As stated



6-7-66

THE WHITE HOUSE

WASHINGTON

April 29, 1966

MEMORANDUM TO HEADS OF DEPARTMENTS AND AGENCIES

One year ago I asked each of you to establish a formal, systematic program to reduce the cost of Government. Your cost reduction goals for both this and the next fiscal year were to be the maximum which imaginative, prudent management could achieve. You were requested every six months to reassess your progress, reevaluate your goals, and look hard once again for new opportunities for savings.

You know what progress your own agency is making. I also want you to know how the Government as a whole is doing.

First goals established for fiscal year 1966 totalled \$871 million for all civilian departments and agencies.

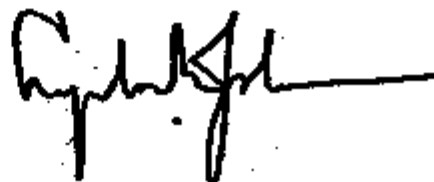
This was good. I am now pleased to learn that your latest estimates are even better.

- By December 31 -- the mid-point of the fiscal year -- the civilian departments and agencies had already taken actions to save over \$700 million.
- As a result of your latest reviews, the total goal for fiscal year 1966 has been raised by \$161 million. It is now slightly over one billion dollars -- \$1,032 million.

In the latest review, you also established goals for fiscal year 1967 which begins on July 1. For that fiscal year, which is still two months away, the present goals of the civilian agencies total \$946 million.

The Department of Defense measures its cost reduction program somewhat differently. Its goal is to save \$6 billion by the end of fiscal year 1968 from savings actions taken by the end of fiscal year 1966. Defense is making good progress. So far it has achieved \$3,075 million of its goal.

A good record to date is not a signal to relax. Our savings goals must continue to be ambitious and imaginative, and we must be fully successful in meeting them. What I said in my 1967 budget message still holds: "I believe we are making good progress in reducing costs and improving efficiency, but I will never be satisfied that we have done all we should." It is vital that you continue to give this cost reduction program your full attention.



Budget & Cost Reductions

Battelle Memorial Institute

505 KING AVENUE COLUMBUS, OHIO 43201 - AREA CODE 614, TELEPHONE 299-3151 - CABLE ADDRESS: BATMIN

June 6, 1966

United States
Atomic Energy Commission
Washington, D. C. 20545

Attention Dr. Glenn T. Seaborg
Director

Dear Dr. Seaborg:

I have your letter of June 1 enclosing the message from President Johnson about cost reduction ideas and actions.

I am forwarding copies of this information to the Directors of our Columbus and Northwest Laboratories.

Sincerely yours,



B. D. Thomas
President

BDT:mgk

6-6-66

~~OFFICIAL USE ONLY~~

BAF-8
Cost Red

UNITED STATES GOVERNMENT

Memorandum

Reference & Reproduction Branch
Copy - Germantown

TO : File

DATE: June 1, 1966

FROM : W. B. McCool, Secretary



SUBJECT: PRESIDENT'S MAY 24 MEMORANDUM RE FINANCIAL MANAGEMENT IMPROVEMENT PROGRAM

SECY:JCH

1. At Information Meeting 591 on May 31, 1966, the Commissioners noted the President's May 24, 1966 memorandum regarding the Joint Financial Management Improvement Program.

2. We have been informed by the Executive Assistant to the General Manager that the Office of the Controller is considering preparation of an appropriate response to the President or to the Director, BOB.

*BAF-8
Cost Reductions



~~OFFICIAL USE ONLY~~

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

4-1-66

Budget & Cost Reduction

JUN 1 1966

Dear Mr. Taylor:

The enclosed message from President Johnson again emphasizes the importance of good cost reduction ideas and actions. It also transmits a pamphlet--the first issue of a series of "Cost Reduction Notes." Additional copies are being distributed to your organization through our field offices so that each idea can be considered carefully, as the President has requested.

I am pleased to see that 4 of the 36 ideas listed in the booklet were chosen from AEC reports and since the program is a joint AEC-contractor drive for efficiency and economy, I am glad that the report identifies the contractor who originated the idea. When other ideas come to your attention which may lead to savings in more than one agency, tell us about them--even in advance of your regular cost reduction report. In the past two years, a number of new contractors have joined the group doing AEC work. They too are now participating in the cost reduction program. Savings from new cost reduction actions dropped from 3.3% of costs incurred in FY 1964 to 2% of costs incurred in FY 1965. The trend in FY 1966 seems to be slightly upward again, but the wholehearted involvement of all who are responsible for effective use of AEC funds is essential.

I know that we can benefit from the experience of other agencies. At the same time, I am confident that by making fuller use of the knowledge, experience, and imagination

6-1-66

Mr. R. C. Taylor

-2-

JUN 1 1966

available in the AEC and contractor organizations we can extend and better our cost reduction record.

Our obligation to obtain greater efficiency and economy, never ends.

Sincerely yours,

Chairman

Mr. R. C. Taylor, President
ACF Industries, Inc.
750 Third Avenue
New York, New York 10017

Enclosures:
As stated

cc: L. P. Gise, Manager, Albuquerque Operations Office

bcc: Chairman Seaborg (2)
Commissioner Palfrey
Commissioner Ramey
Commissioner Tape
General Manager (2)
Secretariat (2)
AGMPP

NOTE: Identical letters sent to those on the attached list.

PAR:PC PAR:DD
Palmer Manly
5/ /66 5/ /66

OFFICE ▶	PAR:PC	PAR:D	AGMPP	AGM	DGM	GM
SURNAME ▶	Winfield:ck	Slaton	Quinn			
DATE ▶	5/ /66	5/ /66	5/ /66	5/ /66	5/ /66	5/ /66

Identical letters sent to the following:

Mr. William E. Zisch, President; Aerojet General Corporation
Dr. T. Keith Glennan, President; Associated Universities, Inc.
Mr. Bertram D. Thomas, President; Battelle Memorial Institute
Dr. Roland F. Beers, President; Roland F. Beers, Inc.
George E. Stoll, President; Bendix Corporation
President Clark Kerr, University of California
Mr. Alan T. Knight, President; Catalytic Construction Company
President George W. Beadle, University of Chicago
Mr. Arthur J. Santry, Jr., President; Combustion Engineering Inc.
Mr. Fletcher Jones, President; Computer Sciences Corporation
Mr. H. D. Doan, President; Dow Chemical Company
Dr. Charles D. Harrington, President; Douglas United Nuclear, Inc.
Mr. Lamot Copeland, President; E. I. du Pont de Nemours & Co.
Mr. K. J. Germeshausen, President; Edgerton, Germeshausen & Grier
Mr. R. W. Olmstead, President; H. K. Ferguson, Co.
Mr. R. F. Pryce, General Manager; Federal Support Services, Inc.
Dr. W. B. Norwood, President; Hanford Occupational Health Foundation, Inc.
Mr. Robert Fluor, President; Fluor Corporation, Ltd.
Mr. Howard S. Wright, President; Howard S. Wright & Associates
Mr. Ira S. Huff, President; F. C. Torkenson Co.
Mr. William H. Colquhoun, President; Ebasco Services, Inc.
Mr. Charles H. Trent, President; Idaho Nuclear Corporation
Mr. J. W. Price, Jr., President; Reactive Metals, Inc.
Dr. Paul M. Gross, President; Oak Ridge Institute of Nuclear Studies
Mr. Roger Lewis, President; General Dynamics Corporation
Mr. F. J. Borch, President; General Electric Co.
Mr. Victor Holt, Jr., President; Goodyear Tire & Rubber Company
President Nathan M. Pusey, Harvard University
Mr. James T. Holmes, President; Holmes & Narver, Inc.
President W. Robert Parks, Iowa State University of Science and Technology
Dr. J. Nelson Judy, President; Isochem, Inc.
Mr. Edwin L. Jones, Jr., President; J. A. Jones Construction Company
Mr. Warren L. Smith, President; M. W. Kellogg, Company
Mr. H. B. Thayer, President; Mallinckrodt Chemical Works
Mr. L. D. Warrel, General Manager; Management Services, Inc. of Tennessee
Mr. W. Arnold Hanger, President; Mason & Hanger - Silas Mason Company
President Julius A. Stratton, Massachusetts Institute of Technology
Mr. Howard K. Nason, President; Monsanto Research Corporation
Mr. Alfred H. Drewes, President; National Lead Company of Ohio
Mr. J. L. Atwood, President; North American Aviation Corp.
Mr. Philip Sporn, President; Ohio Valley Electric Corporation
Mr. Harold E. Gray, President; Pan American World Airways, Inc.
Mr. Stanley Learned, President; Phillips Petroleum Company
Dr. Robert H. Bell, President; Lucius Pitkin, Inc.
President Robert F. Goheen, Princeton University
Mr. J. R. Crockett, General Manager; Reynolds Electrical & Engineering Co., Inc.
Mr. S. P. Schwartz, President; Sandia Corporation
President Wallace Sterling, Stanford University
President A. D. Holt, University of Tennessee
Mr. Birny Mason, Jr., Union Carbide Corporation
Mr. W. Allen Willis, President; University of Rochester
Mr. Frank P. Jewett, President; Vitro Engineering Company
Mr. George R. Wackenhut, President; Wackenhut Services, Inc.

Mr. D. C. Burnham, President and Chief Executive Officer; Westinghouse
Electric Corporation

Mr. J. R. Brennand, Corporate Officer; The Zia Company

Mr. S. N. Rust, Jr., Rust Engineering Co.

Mr. S. E. Scisson, President; Fenix and Scisson, Inc.



Budget - 8. Cost Reduction

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

May 24, 1966

MEMORANDUM FOR HEADS OF DIVISIONS AND OFFICES, HQ
MANAGERS OF FIELD OFFICES

The attached message from President Johnson again emphasizes the importance of good cost reduction ideas and actions. It also describes a pamphlet--the first issue of a series of "Cost Reduction Notes." Enough copies are being distributed with this memorandum so that each idea can be considered carefully, as the President has requested. I will distribute copies to contractors with a separate memorandum.

I am pleased to see that 4 of the 36 ideas listed in the booklet were chosen from AEC reports and since the program is a joint AEC-contractor drive for efficiency and economy, I am glad that the report identifies the contractor who originated the idea. When other ideas come to your attention which may lead to savings in more than one agency, tell us about them--even in advance of your regular cost reduction report. In the past two years, a number of new contractors have joined the group doing AEC work. They too are now participating in the cost reduction program. The whole-hearted involvement of all who are responsible for effective use of AEC funds is essential.

I know that we can benefit from the experience of other agencies. At the same time, I am confident that by making fuller use of the knowledge, experience, and imagination available in the AEC and contractor organizations we can extend and better our cost reduction record.

Our obligation to obtain greater efficiency and economy never ends.

Gene S. Scarborough
Chairman

Attachments: *filed BP*
As stated

5-24-66

Budget - Cost Reduction

10

THE WHITE HOUSE

WASHINGTON

April 29, 1966

MEMORANDUM TO HEADS OF DEPARTMENTS AND AGENCIES

One year ago I asked each of you to establish a formal, systematic program to reduce the cost of Government. Your cost reduction goals for both this and the next fiscal year were to be the maximum which imaginative, prudent management could achieve. You were requested every six months to reassess your progress, reevaluate your goals, and look hard once again for new opportunities for savings.

You know what progress your own agency is making. I also want you to know how the Government as a whole is doing.

First goals established for fiscal year 1966 totalled \$871 million for all civilian departments and agencies.

Budget & Cost Reduction 5

**GENERAL ELECTRIC
COMPANY**

870 LEXINGTON AVE, NEW YORK, N. Y. 10022

W

C. K. RIEGER
VICE PRESIDENT AND GROUP EXECUTIVE

April 28, 1966

The Honorable Glenn T. Seaborg
Chairman
Atomic Energy Commission
Washington, D. C.

Dear Chairman Seaborg:

For your interest, I am enclosing a management newsletter which we are releasing next Monday on the subject of the wage guidepost. This newsletter presents our evaluation of the 3.2 percent guidepost and some suggestions for strengthening its value as an educational device.

We hope that what we have here will be of some help to the Administration's critically important fight against inflationary pressures.

Because of your interest, I wanted you to have this copy in advance of its release to the press.

Cordially,

Chuck Rieger

Enclosure

4-28-66

MAJORITY MEMBERS
WILLIAM L. DAWSON, D.L., CHAIRMAN
CHET HOLIFIELD, CALIF.
JACK BROOKS, TEX.
R. M. FOUNTAIN, ALA.
PORTER J. HART, JR., VA.
JOHN A. BLATNIK, MINN.
ROBERT E. JONES, ALA.
EDWARD A. GARNATZ, MD.
JOHN E. MOSE, CALIF.
DANTE B. FASCELL, FLA.
MONTY S. REUSS, WIS.
JOHN S. MONAGHAN, CONN.
TIMOTHY H. MACDONALD, MASS.
J. EDWARD RORER, IND.
WILLIAM E. MOORHEAD, PA.
CORNELIUS E. GALLAGHER, N.J.
WILLIAM J. RUMMEL, MD.
BENJAMIN S. ROSENTHAL, N.Y.
JIM WRIGHT, TEX.
FERDINAND J. ST GERMAIN, N.J.
DAVID S. KIRK, UTAH
JOHN B. DOW, N.Y.
KENNY DELBONO, N.J.

EIGHTY-NINTH CONGRESS

Congress of the United States
House of Representatives

COMMITTEE ON GOVERNMENT OPERATIONS

2157 Rayburn House Office Building

Washington, D.C.

April 26, 1966

BAF-8
Cost
MINORITY MEMBERS
CLARENCE J. BROWN, OHIO
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ROBERT F. GRAYSON, MICH.
GORDEN H. RICE, N.Y.
FRANK J. HORTON, N.Y.
DELBERT L. LATTY, OHIO
DONALD RUMSFELD, ILL.
WILLIAM L. GUDERSON, ALA.
JOHN H. SPENCER, ILL.
HOWARD H. CALLAWAY, GA.
EDWARD J. BARNETT, FLA.
CHRISTINE PAT DAVIS,
STAFF DIRECTOR
CAPitol 4-3121
MAJORITY—EXTENSION 3001
MINORITY—EXTENSION 3074

Honorable Glenn T. Seaborg
Chairman
U. S. Atomic Energy Commission
Washington, D. C.

Dear Mr. Chairman: B-146924

The Committee on Government Operations has received the Comptroller General's report of April 21, 1966, entitled Savings attainable through reductions in fire department and guard force staffing at contractor-operated installations under the supervision of the Oak Ridge Operations Office - Atomic Energy Commission.

The Committee would appreciate having your views and comments on this report. In particular, we would like a statement of your position on each recommendation, and on each finding of deficiency, if any, which is reported by the Comptroller General, together with a full explanation of the corrective actions, if any, which you have initiated as a result of such recommendations or findings. Also, where applicable, your reply should include your current evaluation of the effectiveness of any such corrective actions. Any other observations you may wish to make will be welcome.

Will you kindly transmit your reply in triplicate within 30 days from the date hereof.

Respectfully,

William L. Dawson

WILLIAM L. DAWSON
Chairman

ms

4-26-66



Handwritten: 5 10

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-146924

April 21, 1966 *and*

Dear Dr. Seaborg:

Herewith is a copy of our report to the Congress on savings attainable through reductions in fire department and guard force staffing at contractor-operated installations under the supervision of the Oak Ridge Operations Office--Atomic Energy Commission.

In this report we are recommending that the Commission's General Manager require a review of the fire protection and prevention and guard force activities at other contractor-operated installations for the purpose of ascertaining whether adequate and effective levels of these activities are being conducted in the most economical manner. We are recommending also that the General Manager direct the attention of employees to the importance of thorough reviews and analyses of cost and staffing reports regularly submitted by operating contractors, which provide a basis for evaluating the comparative economy of similar activities at different plants.

Sincerely yours,

Handwritten signature: Frank H. Ventzel

Assistant Comptroller General
of the United States

Enclosure *w/3*

The Honorable Glenn T. Seaborg
Chairman, Atomic Energy Commission

Handwritten: 4-21-66

THE WHITE HOUSE
WASHINGTON

April 20, 1966

MEMORANDUM FOR THE HEADS OF
DEPARTMENTS AND AGENCIES

If Federal agencies were still operating at their 1964 level of efficiency, my 1966 and 1967 budgets would have to be \$3 billion higher. These savings mean that we are getting more value for our tax dollars. It means the American people are \$3 billion better off.

This makes clear why I consider cost reduction so important. It explains why I want every Government employee to think hard about opportunities for cost reduction, and why I want the best ideas publicized for all to use. A good idea from one agency should not stop there, but must be made known throughout the Government.

Some time ago I asked the Budget Director to develop a system of exchanging information about cost reduction among Federal agencies. He has prepared the pamphlet which is attached -- the first issue of a series of "Cost Reduction Notes."

"Cost Reduction Notes" describes imaginative actions which have produced savings in one agency and which carry promise of applicability throughout the Government. The ideas vary widely, but they were chosen as ones likely to be useful to agencies with differing responsibilities. By bringing the ideas together in a pamphlet which will be circulated throughout the Federal Government, we are seeking to multiply the savings already achieved.

I want "Cost Reduction Notes" to be read widely in every agency, both in Washington and in the field. I want each idea to be considered carefully. I hope that many of them can be put to use.

Lyndon B. Johnson

UNITED STATES GOVERNMENT

Memorandum

TO : Heads of Divisions & Offices, HQ
Managers of Field Offices

DATE: March 9, 1966

FROM : William H. Slaton, Director
Division of Plans and Reports, HQ

SUBJECT: COST REDUCTION REPORTS, PERIOD ENDING 12/31/65

Copies of the following are attached for your information and use:

1. a letter from the Chairman transmitting two reports to the Director of the Bureau of the Budget,
 - the semiannual report of progress toward cost reduction goals,
 - the semiannual report of cost reduction actions taken by contractors, and
2. a notification to the President of our compliance with his reporting requirements.

We are giving further study to those individual incoming reports which seem to reflect difficulty in maintaining program momentum or in stating goals and actions clearly, and will be in touch with the appropriate offices in the near future.

Attachments:
As stated

cc: Harry S. Traynor, Asst. to General Manager
Dr. S. G. English, Asst. General Manager for Research and Development
John A. Erlewine, Asst. General Manager for Operations
George F. Quinn, Asst. General Manager for Plans and Production
Howard C. Brown, Asst. General Manager for Administration
Dr. G. M. Kavanagh, Asst. General Manager for Reactors
John A. Hall, Asst. General Manager for International Activities
John P. Abbadessa, Controller
Brig. Gen. Delmar L. Crowson, Director, Div. of Military Application
Harold L. Price, Director of Regulation





UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

MAR 1 1966

Dear Mr. President:

A report on AEC cost reduction actions taken during the first half of fiscal year 1966 has been sent to Mr. Charles Schultze as you have requested.

Since the establishment of cost reduction and management improvement goals for FY 1966 and FY 1967, AEC programs and operations have been subjected to further reviews. In the review process, it was determined that further economies could be achieved in some programs and operations with the net result, reflected in detail in the report, that we have raised the goals. The total increase is about \$96,000,000 for the two years, of which about \$23,000,000 is in FY 1966. Based on progress to date, we expect to meet the revised goals.

In addition, we have sent to Mr. Schultze a summary report of cost reduction actions taken by AEC's major cost-type contractors during the first half of FY 1966. I am sure you will be gratified to note that the report of their activity reflects more than a 16 percent increase in actions taken and more than an 11 percent increase in savings as compared with the previous six-month period.

Respectfully yours,

Chairman

The President
The White House

A. Increased Productivity and Efficiency (cont'd)

Reduce Materials Cost

- developing and substituting an electronic emanating device in place of erecting shield structures around classified data processing equipment is saving \$1.27 million in FY '66.
- finding a way to substitute government owned tank cars for one-time storage of radioactive liquid products instead of erecting fixed storage tanks saved \$200,000.
- transferring fabricated nuclear components between users having unique requirements instead of having the materials turned in for reprocessing and re-manufacture saved \$245,000.

Reduce Management Cost

- using ADP during a special review of contractor proposed capital projects will save \$236,000 during FY '66.
- devising means for eliminating certain security guard requirements will save \$54,000.
- reorganizing contractors work forces to better meet the demands of a changed work load will save \$150,000 in FY '66 and \$810,000 during FY '67.

Reduce Service Cost

- implementing findings from a survey of communications equipment and usage is expected to save \$405,000 during FY '67.
- a changed requirement that eliminated the need for shared computer time and inability of a promising motor vehicle oil filter system to perform as expected eliminated projected savings of \$25,000 and \$14,000 respectively in FY '66.

Applicable data for this category is also reported on the format prescribed by Circular A-44, attached. As mentioned above, the appendix gives additional examples and more detailed information on these actions.

B. Elimination of Low Priority Activities, Substitution of Less Costly Alternatives; Reductions in Fund Requirements.

Progressive increases in estimates of budget reductions and savings have been made since our original report of annual goals was submitted. On September 15, 1965, in connection with submission of the FY 1967 budget estimates, and further consideration of AEC projects and programs from the standpoint of priority, alternatives, and other possible management actions to reduce funding requirements, the estimates of reductions and savings for FY 1966 and FY 1967 were increased to \$285 million and \$240 million respectively. As shown in the table below, these goals, after continuing reviews, have been increased again to the amounts shown in the columns indicated as "Revised".

	FY 1966 Reductions and Savings		FY 1967 Reductions and Savings	
	(In Thousands)			
	<u>Previous</u>	<u>Revised</u>	<u>Previous</u>	<u>Revised</u>
Raw Materials	\$ 50,968	\$ 50,968	\$ 97,953	\$ 97,953 #
Special Nuclear Materials	31,073	31,518	37,465	43,564 #
Weapons	47,749	51,566	31,707	61,569
Reactor Development	103,494	113,041	41,136	55,006
Physical Research	2,110	3,154	2,400	7,220
Biology and Medicine	2,075	2,075	2,305	2,305
Training, Education and Informa- tion	1,624	1,601	62	562
Isotopes	780	845	1,185	1,185
Community	40	40	200	200
Security Investigations	-	-	200	100
Increase or Decrease in Selected Resources	<u>45,170</u>	<u>51,586</u>	<u>25,500</u>	<u>40,880</u>
	\$285,083	\$306,394	\$240,113	\$310,544

Reductions in raw materials procurement and U-235 production costs are from FY 1965 levels; all other reductions are from immediately preceding fiscal year.

C. Application of Prior Year's Savings to Reduce Appropriation Requests

In addition to actions taken, included in budget estimates, and reflected in the preceding section B, the savings tabulated below, including the increase in the FY 1967 figure, have been effected. The funds have been applied to reduce future appropriation requests. This is a firm accomplishment as of 12/31/65.

	FY 1966 Reductions and Savings		FY 1967 Reductions and Savings	
	(In Thousands)			
	<u>Previous</u>	<u>Revised</u>	<u>Previous</u>	<u>Revised</u>
Application of Prior Year Savings to Reduce Approp- riation Requests	131,784	131,784	51,570	85,270

D. AEC Manpower Goal - Increased Productivity and Efficiency

The revised goal for improved utilization of AEC manpower follows:

Full-Time Permanent Employment

<u>AEC Manpower Goal</u>	<u>Total</u>	<u>To be realized</u>			
		<u>In FY 1966</u>		<u>In FY 1967</u>	
		<u>Direction & Admin.</u>	<u>Other Direct Employment</u>	<u>Direction & Admin.</u>	<u>Other Direct Employment</u>
Eliminate positions	286	95	112	30	49
Redeploy positions	144	95	19	30	0
Reduction goal	142	0	93	0	49

Greater efforts in technical direction and control of research and development operations now require substantial augmentation of staff in several divisions and offices. These needs will require equivalent savings of positions in other activities. The previous estimate of 65 positions to be eliminated in direction and administration in FY 1966 is now revised

D. AEC Manpower Goal - Increased Productivity and Efficiency-(cont'd)

to 95. The goal for reduction of positions in other direct employment is increased by one position to reflect the reductions achieved at the time of this report.

Achievement to December 31, 1965, Against the Previous Goals

AEC Manpower Goal	In FY 1966					
	Total		Direc. & Admin.		Other Direct Empl.	
	Goal	Achieved	Goal	Achieved	Goal	Achieved
Eliminate Positions	176	182	65	70	111	112
Redeploy Positions	83	89	65	70	18	19
Reduction	93	93	0	0	93	93

In the reporting period, seventy positions have been eliminated by improved utilization of manpower in direction and administration of AEC programs.

New positions which were provided as a result of these economies were principally engineers required for technical direction of research and development operations in the reactor and isotopes development programs. The critical need for further increases in these areas will require further redeployment of positions as soon as conditions permit.

SUMMARY REPORT
COST REDUCTION AND MANAGEMENT IMPROVEMENT PROGRAM

Goal for increased
productivity and efficiency

U. S. ATOMIC ENERGY COMMISSION
Date March 1, 1966

Goals and Planned Efforts to Achieve Them (1)	Annual Savings Goals				Estimated Annual Savings from Actions in Reporting Year						Other Bene- fits (12)	Proposed Use of Savings- Use Key (13)
	Positions		Dollars (in thousands)		Positions			Dollars (in thousands)				
	CY (2)	NY (3)	CY (4)	NY (5)	CY (6)	NY (7)	BNY (8)	CY (9)	NY (10)	BNY (11)		
A. INCREASED PRODUCTIVITY AND EFFICIENCY												
1. <u>Reduce Operations and Assembly Cost</u> Evaluation of operating plans and practices, developing alternate methods, introducing technological improve- ments.	Revision		4,882 4,440	11,573 11,601				2,396	3,151			U
2. <u>Reduce Materials Cost</u> Specifying less costly materials, buying at minimum cost and im- proving procurement techniques.	Revision		5,556 7,229	1,167 2,015				5,368	975			D
3. <u>Reduce Management Cost</u> Reorganization and con- solidation of functions and use of lower cost space by contractors and AEC.	Revision		872 1,658	710 1,749				910	1,670			D

SUMMARY REPORT
COST REDUCTION AND MANAGEMENT IMPROVEMENT PROGRAM

Goal for increased
productivity and efficiency

U. S. ATOMIC ENERGY COMMISSION
Date March 1, 1966

Goals and Planned Efforts to Achieve Them (1)	Annual Savings Goals				Estimated Annual Savings from Actions in Reporting Year						Other Bene- fits (12)	Proposed Use of Savings-- Use Key (13)
	Positions		Dollars (in thousands)		Positions			Dollars (in thousands)				
	CY (2)	NY (3)	CY (4)	NY (5)	CY (6)	NY (7)	BNY (8)	CY (9)	NY (10)	BNY (11)		
4. <u>Reduce Service Costs</u> Restricting travel, usage of vehicles, reducing cost of ADP, and further austerity in level of services.			185 182	138 630				177	519			D
TOTALS			13,509	15,995				8,851	6,315			

Savings Key:

- A. Use to finance increased costs, such as pay increases.
- B. Apply to production of more units of work.
- C. Apply to raise quality of service or performance.
- D. Use to finance some other approved program or activity.
- E. Place in reserve, or apply to reducing President's budget.



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

MAR 1 1966

Dear Charlie:

Our first semi-annual report of progress toward cost reduction goals has been prepared and is forwarded herewith as required by BOB Circular A-44.

The report reflects results from reviews of the Atomic Energy Commission's programs during the past several months as well as dollar and manpower savings resulting from numerous other actions taken by AEC management to increase productivity and efficiency. Our goals for FY 1966 have been increased by about \$23 million and for FY 1967 by about \$73 million. Based on progress to date, we expect to meet the revised goals.

A summary report of cost reduction actions taken by AEC's major cost-type contractors during the first half of FY 1966 is also enclosed. The reported actions are expected to save more than \$29 million during the year.

Cordially,

Chairman

The Honorable Charles L. Schultze
Director, Bureau of the Budget

Enclosures:
Semi-Annual Report of Progress Toward
Annual Cost Reduction Goals
Cost Reduction Actions Taken by
AEC Contractors

U. S. ATOMIC ENERGY COMMISSION

COST REDUCTION AND MANAGEMENT IMPROVEMENT PROGRAM

SEMI-ANNUAL REPORT
OF PROGRESS TOWARD ANNUAL GOALS
AS OF MARCH 1, 1966
(Prepared pursuant to BOB Circular A-44)

In this semi-annual progress report, the updating of goals and the estimated results from actions taken during the past six months are described. The summary form specified in Circular A-44 is attached, along with examples of the actions which are yielding savings through "increases in productivity and efficiency".

Since the establishment of cost reduction and management improvement goals for FY 1966 and FY 1967, AEC programs and operations have been subjected to further reviews. In the review process, it was determined that further economies could be achieved in some programs and operations with the net result, reflected in detail in the report, that we have raised the goals. The total increase is about \$96,000,000 for the two years of which about \$23,000,000 is in FY 1966. Based on progress as of December 31, 1965, we fully expect to meet the revised goals.

A. Increased Productivity and Efficiency

A total of 226 specific actions have been taken toward reaching the goals established for this category. They will yield savings estimated at \$8,851,000 in FY 1966 and \$6,315,000 in FY 1967. Examples of the actions that lead to these savings are appended to this report. Reviews of operations caused both increases and decreases in previous estimates but overall brought to light opportunities that could lead to economies beyond those previously planned. As a consequence, we have increased our goals as shown in the following table.

	FY 1966		FY 1967	
	<u>Previous</u>	<u>Revised</u>	<u>Previous</u>	<u>Revised</u>
		(in thousands)		
Reduce Operation and Assembly Cost	\$ 4,882	\$ 4,440	\$11,573	\$11,601
Reduce Materials Cost	5,556	7,229	1,167	2,015
Reduce Management Cost	872	1,658	710	1,749
Reduce Service Cost	<u>185</u>	<u>182</u>	<u>138</u>	<u>630</u>
	\$11,495	\$13,509	\$13,588	\$15,995

Factors in the increases and decreases within goals are:

Reduce Operation and Assembly Cost

-several changes, both up and down, took place in detailed actions supporting this category. The net effect is slightly down in FY 1966 and no significant change is reflected for this category in FY 1967.

U. S. ATOMIC ENERGY COMMISSION

APPENDIX TO SEMI-ANNUAL REPORT
OF PROGRESS TOWARD ANNUAL GOALS
AS OF MARCH 1, 1966

Examples of cost reduction actions taken, or underway, to achieve goals under Category A - Increased Productivity and Efficiency

- *1. The Idaho Operations Office has initiated an electrical power demand study encompassing all facilities at the National Reactor Testing Station. When completed, careful scheduling of electrical loads will keep the total requirement below the upper limit of contract demand. The anticipated savings are \$20,000 per year effective FY '67 based on tests and partial schedules saving \$3,000 during FY '66.
2. A new one-time program at Savannah River produced a large quantity of radioactive thorium nitrate solution that required storage for 6 months until radioactivity had decayed enough to permit shipping to another site for further processing. The contractor was ready to start construction on a \$200,000 storage tank and related equipment facility when Operations Office personnel thought of investigating availability of government owned tank cars. Sufficient surplus tank cars were located and qualified for the purpose saving virtually all of the \$200,000.
3. The Division of Technical Information now supplies depository libraries with 100% micronegative collections of AEC research and development reports. This permitted a decrease in the number of printed copies of reports to effect the same distribution resulting in an FY 1966 savings of \$227,000.
4. The San Francisco Operations Office has worked out a means of transferring 56 kg of U-235 from the Lawrence Radiation Laboratory to the Defense Atomic Support Agency to meet a special need. The AEC saved \$90,000 in costs of reprocessing and related costs that would have been incurred to recover and return this material to the AEC production stream. In addition, DASA will save about \$385,000 in various costs including fabrication and uranium scrap reprocessing.
5. Routine assays of depleted uranium had been performed for security purposes rather than to meet technical requirements. Through declassification action this operation was eliminated saving \$22,000 annually.
6. Contractor employees had been required to pick up payroll checks at the on-site banking facility where the time lost in waiting lines represented an annual cost of \$22,000. Payroll checks are now distributed directly to employees or a designated bank.

* Actions which might be applicable to the operations of other government departments and agencies.

7. By more intensive review of the relationship between vital program objectives and the immediate purposes of the overtime request, the Schenectady Naval Reactors Office, for example, expects through tightening up on approvals of contractor requests for overtime, to save \$245,000.
8. The Office of the Controller successfully negotiated a reduction in the cost to the AEC of a contractors pension plan by \$183,000 annually.
- *9. Personnel of the AEC Division of Security patented an electromagnetic shielding around equipment that processes classified information. Installation of this device saved the AEC \$1,271,400 during the first half of FY '66. By supplying seven of these devices to other agencies the government saved an additional \$28,000 during the same time. One hundred fifty additional units are planned in connection with the proposed Secure Data Transmission System that will save about \$585,000.
- *10. A contractor had been paying all invoices daily as received and approved. Procedures were changed to pay invoices subject to discount on the due date and to pay net invoices once each month. This reduced the number of checks approximately 18,000 per year with resultant saving of about \$2,700 in typing and mailing costs.
- *11. The standard clothing allowance for AEC firemen at NKTS provided for a dress uniform. It was determined that occasions requiring a dress uniform were almost non-existent therefore this portion of the clothing allowance was dropped.
12. Albuquerque Operations Office has been participating with a contractor during the procurement cycle to gain fuller use of value engineering and government excess property lists. Seven actions yielded savings of \$120,000.
13. Schenectady Naval Reactors Operations Office reviewed the number of contractor personnel performing nuclear materials control functions and believed them excessive. By working with the contractor, the 16 man staff was reduced to 7 people.
14. The New York Operations Office, during its review of facility utilization, determined that 4 marginal air sampling sites could be shut down saving \$12,000 this year and \$45,000 annually thereafter.
15. A review of stocks on hand for 76 preprinted forms disclosed that the supply of 15 of the forms was excessive. The reproduction supervisor imposed revisions of economic order quantities.
- *16. The Nevada Operations Office had medical service for its cost type contractors consolidated so that all qualify for reduced State Workmen's Compensation insurance premiums thereby saving \$46,000 per year.

17. The regulatory procedures of the AEC have been simplified to reduce the time between application for, and the issuance of, a license.

The appeal procedures have been simplified by eliminating the need to petition the AEC for permission to file an appeal. New appeals can be filed directly.

The average time for the Atomic Safety and Licensing Board to issue a decision following a hearing had been 50 days. The use of new simplified procedures cut this time to 21 days in the Dresden II case.

18. A contractor had been paying an extra day's pay for holidays falling on a Saturday. The Savannah River Operations Office instructed the contractor to make the Friday preceding the holiday a day off with pay, excepting the work force needed to maintain continuous and high-priority production, to save \$80,000 in FY 1967.
- *19. AEC reviewed the costs of, and unusual circumstances behind, securing a particular area and determined that the security action was excessive. Savings of \$54,000 resulted.
20. The AEC turned in newly excessed tungsten with current market value of \$290,000 and mercury with current market value of \$2.3 million to the G.S.A. This represents a return of appreciated assets to the government, but is not reported as an AEC saving.

U. S. Atomic Energy Commission

Summary Report of Cost Reduction Actions
Taken by Participating Contractors
July 1, 1965 - December 31, 1965

This summary report of cost reduction actions taken by AEC's larger cost-type contractors during the semi-annual period ending December 31, 1965, reflects more than a 16% increase in actions taken and more than an 11% increase in reported savings as compared with the period ending June 30, 1965. The average dollar value of first year savings per action continued to decrease. Taken together, these three items indicate the greater effort being put forth to achieve further economy. The contractors are meeting the continuing challenge by the President and are producing praiseworthy results.

The number of actions taken and the savings reported by the participating contractors are shown in the table below. Following the table is a list of selected examples of cost reduction actions taken during the period. The examples which might be useful to other agencies have been identified.

	No. of Actions During Period	Estimated Savings Realized 7-1-65 12-31-65	Estimated Carry-Forward Benefits 1-1-66 6-30-66	Total For FY 1966
		(in millions)		
1. Conducting programs on a more austere basis	874	\$ 5.83	\$2.47	\$ 8.30
2. Utilizing less expensive materials and components	482	3.26	.78	4.04
3. Buying at minimum cost	972	7.25	1.38	8.63
4. Installing technological and process improvements	424	2.11	1.77	3.88
5. Eliminating projects of low utility	22	.17	.04	.21
6. Improving management methods	291	1.70	1.48	3.18
7. Other	<u>54</u>	<u>.75</u>	<u>.06</u>	<u>.81</u>
Summary Total	3,119	\$21.07	\$7.98	\$29.05

U. S. Atomic Energy Commission

- - - -

Selected Examples of Cost Reduction Actions
Taken by Participating Contractors
July 1, 1965 - December 31, 1965

Examples selected from 3,119 deliberate actions taken by AEC's cost-reimbursement contractors during the six-month period ending December 31, 1965, are listed below. With the examples are estimates of the savings anticipated during fiscal year 1966 from each action taken to achieve economy and efficiency in AEC contract operations.

Net Savings Estimated
for FY 1966
(in thousands of dollars)

TYPE I - CONDUCTING APPROVED PROGRAMS ON A MORE
AUSTERE BASIS:

- *1. The Savannah River Plant News, which is issued 26 times per year, was changed from letter press printing to offset printing. Savings of \$255.00 per issue resulted. \$ 6
2. Design specifications for repair of biological seals around certain reactors at Savannah River specified packing the space around piping penetrating the seal with lead wool and then pouring on a polyurethane sealing compound. A DuPont construction engineer reasoned that under operating conditions the piping would expand, squeezing the lead wool into an acceptable seal. After actual tests proved the feasibility of the idea, the requirement for polyurethane compound was deleted. \$ 6
- *3. The painters in the mechanical shops at the Lawrence Radiation Laboratory are now using a recently marketed bond-release type paint remover for removing paint on electrical panels. This work was previously done by sanding machines. This new method saves time, and results in a superior job. \$ 2

*Actions which might be applicable to the operations of other government departments and agencies.

Net Savings Estimated
for FY 1966
(in thousands of dollars)

TYPE I - CONDUCTING APPROVED PROGRAMS ON A MORE
AUSTERE BASIS (cont'd)

- *4. A new modular electronic test equipment system has been devised to eliminate duplication in design and drafting. This system allows the designer to select proven modules and to design a system by combining these modules. This leads to standardization of designs in the field, simplifies maintenance, and eliminates drafting and fabrication of each new test system. The savings realized are 50% of the design and drafting time. \$25
5. GSA sold at a public auction a surplus lathe which had been decontaminated by the Dow Chemical Company. Previously, contaminated lathes had been disposed of as waste. \$ 5
6. A new policy for the thorough evaluation of electronic calculators' capabilities prior to purchase has been established in the High Energy Physics Division at Argonne National Laboratory. The costs of calculator purchases are being reduced without lowering the performance of the basic work requirement. \$ 5
7. At the Oak Ridge Gaseous Diffusion Plant there is a frequent need for cleaning the outside air intake filters, to provide adequate air flow to cool compressor motors. An emergency fire engine was modified to permit use of its pumper in the washing of the filters, a job previously done by labor crews. This resulted in cleaner filters, reduced the frequency of cleaning, and permitted diversion of labor to other essential work. \$ 7

TYPE II - SPECIFYING OR UTILIZING LESS EXPENSIVE
MATERIALS AND COMPONENTS:

- *1. The Sandia Corporation has developed a standard cover which will be used on all future publications. Significant savings will be realized in the areas of cover design, makeup, stock storage, and illustrators concepts and approval. \$10

Net Savings Estimated
for FY 1966
(in thousands of dollars)

TYPE II - SPECIFYING OR UTILIZING LESS EXPENSIVE
MATERIALS AND COMPONENTS..(cont'd)

- *2. Savings of \$54,000 per year are projected as a result of the development of an improved method of mounting large precision mirrors in spark chambers. The accepted past practice had been to use a vacuum chuck, but small bumps on the surface of the mirror could not be eliminated. The process developed at Argonne National Laboratory involves use of fine adjusting screws attached to the mirror backs with epoxy adhesive. Fifteen mirrors now being made will incorporate this new method of insuring flatness. These mirrors are expected to give more satisfactory performance, and the process will reduce not only the cost of fabricating the mirrors but the cost of tuning the spark chambers in which the mirrors are installed. \$54
3. Superconducting magnets require only a fraction of the electrical power needed to operate a conventional magnet of similar capacity. One aspect of a development program for such magnets involved the production of suitable cable for use in winding the magnets. Argonne National Laboratory staff members were successful in converting a conventional lathe into a special cable-forming machine. Use of this modified machine doubled production of the cable and is expected to result in savings of \$10,000 per year. \$10
- *4. The present process for preparing Vu-Graphs of oscilloscope wave forms on Polaroid positive prints requires the use of technical art facilities and labor. Sandia found that the normally discarded negative of a Polaroid film can be used to make Xerox or Thermofax reproductions that are satisfactory for most applications. This process enables the engineer to obtain a Vu-Graph in much less time than by previous methods. The dollar savings entered are based on one Division only. \$ 1

Net Savings Estimated
for FY 1966
(in thousands of dollars)

TYPE II - SPECIFYING OR UTILIZING LESS EXPENSIVE
MATERIALS AND COMPONENTS (cont'd)

- *5. Savings have been made by using less expensive methylene chloride instead of Freon for cleaning components at various stages in final assembly operations. \$ 5
6. As a part of the finally negotiated contract for a data processing system, the supplier agreed to furnish General Electric assistance, without charge, to convert existing computer programs to the new system. During the current six months approximately 5,000 programming man-hours of assistance were received. \$15
7. An office-type offset copy machine (Multilith 85) was procured to reproduce multiple copies previously reproduced by diazo process and Xerox 914. In the area serviced by these machines, over 32,000 copies are required each month. Offset copies (at \$.0025 per copy) produced a savings of approximately \$500 per month over diazo (at \$.015 per copy) and Xerox (at \$.05 per copy). The new machine was amortized in 3 months. \$ 6
- *8. Data processing cards, with transparent Mylar film mounted into an aperture may be substituted for standard glass slides at the Oak Ridge National Laboratory for the viewing of biological tissues. The tissues are mounted directly on the Mylar. The data pertaining to each specimen is recorded on the same card, providing a permanent record, which can be machine processed. This process is 3 steps shorter than the glass slide process, reducing manpower requirements. Material cost for aperture cards with Mylar inserts is estimated at one-fiftieth that of glass slides. Net savings have not yet accrued from this idea but it is cited for consideration by other laboratories.
9. The Advanced Test Reactor (ATR) critical facility simulates the nuclear characteristics of the ATR itself which has hafnium as the poison in the control rods. However, determination of the correlation between hafnium and cadmium made it possible to use the less costly cadmium in the ATR critical facility without impairing its operation or the data generated. \$51

Net Savings Estimated
for FY 1966
(in thousands of dollars)

TYPE II - SPECIFYING OR UTILIZING LESS EXPENSIVE
MATERIALS AND COMPONENTS (cont'd)

10. In efforts to reduce costs, management of the Princeton Pennsylvania Accelerator (PPA) secured from Brookhaven National Laboratory sufficient quantities of deuterium gas to support recent experimental needs. Although Brookhaven's gauges were not capable of measuring the purity desired, the product was found to be completely useful. Commercial sources quoted PPA a price which was six times that of Brookhaven's. \$18
11. During 1964, repair work on a heavy water plant at Savannah River entailed sandblasting 12 large distillation columns down to clean metal. New work authorized in 1965 involved the sandblasting of 12 additional columns. Using experience gained, a 50-ton automatic discharge sand silo was purchased to obtain economies of purchasing blasting sand in bulk plus the elimination of manual sand handling. A net saving of \$16,000 will result. \$16
12. At Savannah River, twenty-one cadmium reactor control rods have been replaced with cobalt 59 rods. In addition to being utilized as control rods, the cobalt 59 rods are used as the source of producing the useful isotope, cobalt 60. \$64
13. Fuel materials for nuclear plants are subjected to various tests to insure integrity under operating conditions. In preparation of experimental samples of fuel material for testing it is necessary to separate bulk ceramic fuel powders from impurities. At the Bettis Atomic Power Laboratory this has been achieved by putting the material into solution and pouring it through expensive porous glass filtering funnels. A technical study was initiated to develop a less

Net Savings Estimated
for FY 1966
(in thousands of dollars)

TYPE II - SPECIFYING OR UTILIZING LESS EXPENSIVE
MATERIALS AND COMPONENTS (cont'd)

13. (cont'd)

expensive method and it was found that a satisfactory separation could be obtained by using a centrifuge with consequent savings in material and labor cost.

\$ 8

TYPE III - BUYING AT MINIMUM COST CONSISTENT WITH
PROGRAM NEEDS:

1. Argonne National Laboratory's electric bill will be reduced by about \$100,000 per year as a result of a cooperative effort on the part of Commonwealth Edison Company, the Illinois Commerce Commission and Argonne. In 1964, Argonne initiated discussions with the utility firm in an effort to secure lower rates. In December, 1965, these discussions culminated in ICC approval of a reduction in Edison's rate from .91¢ per kWh to .864¢ per kWh. Other Chicago-area users of large amounts of power also will benefit from the rate cut. It is estimated that the new rate, which became effective in mid-December, 1965, reduced the Laboratory's costs by \$3,000 in the final weeks of 1965 and that savings of about \$50,000 will be realized in the first six months of 1966.
2. Heretofore, National Lead Company of Ohio used mold cups fabricated from a large single piece of graphite. When the cup eroded or chipped it had to be replaced. Now a two piece cup, made up of a base which is the largest piece and can be made from scrap graphite and used indefinitely because it does not come in contact with the metal, and a top, which is a thin piece of graphite machined to produce whatever preshape is desired on the ingot. In normal casting operations, only the thin top section will have to be replaced regularly. The two-piece cup has been adopted for normal and enriched ingots and is proposed for Mark V ingots in the near future.
3. A total of 11,000 gallons of surplus oil costing \$.08 a gallon was bought to be used for spraying intake filters at the Paduach Plant instead of using oil costing \$.38 a gallon.

\$53

\$12

\$ 3

Net Savings Estimated
for FY 1966
(in thousands of dollars)

TYPE III - BUYING AT MINIMUM COST CONSISTENT WITH
PROGRAM NEEDS (cont'd)

4. Centralization of gas container storage and a new tagging system at the Princeton Pennsylvania Accelerator will decrease demurrage charges and tie up less money in deposits. The change will also result in more efficient use of gas and will cut down on the number of bottles of gas purchased. \$ 8
- *5. In order to reduce cost for maintenance, the Sandia Corporation standardized on three basic paints purchased in five gallon containers and installed a paint blending machine to mix its own paints. Previously, paint had been purchased in 82 ready-mixed colors in small lots and containers ranging from pints to gallons. \$ 9

TYPE IV - ACCELERATING INSTALLATION OF TECHNOLOGICAL
AND PROCESS IMPROVEMENTS DESIGNED TO REDUCE
OPERATING COSTS:

- *1. Replacement of 750 watt, 1000 hour incandescent lamps in shop buildings with 400 watt, 20,000 hour mercury lamps generated a substantial savings without sacrificing illumination. The old lamps required approximately five relamping operations per year. Each relamping required approximately 112 man-hours. The new lamps will require relamping only once each four years. Savings shown are on maintenance alone. \$ 2
2. Methods were developed by the Dow Chemical Company for repairing approximately 100 vacuum pumps which had been removed from service because they were no longer repairable by previously known methods. This action eliminated the need to purchase new pumps. \$41
3. Previously, the exhaust gas from the plutonium hydro-fluorination process passed through banks of carbon filters where plutonium fluoride dust was removed. These filters were replaced by filters which use disposable polypropylene yarn elements. This modification cost \$200 but saves semi-annually \$5,100 in filter elements and \$900 in labor without sacrificing efficiency. \$12

Net Savings Estimated
for FY 1966
(in thousands of dollars)

TYPE IV - ACCELERATING INSTALLATION OF TECHNOLOGICAL
AND PROCESS IMPROVEMENTS DESIGNED TO REDUCE
OPERATING COSTS (cont'd)

4. The installation of a molecular sieve bed for purifying oil at the Oak Ridge Y-12 Plant saves \$4,000 annually in operating costs. It was found that oil containing free water plus 6,000 ppm dissolved water and an acid number of 0.80 could be cleaned up by sieve treatment to a respectable 80 ppm dissolved water and a 0.02 acid number. This treatment replaces the conventional flash vaporization and clay filtration system. \$ 4
5. The University of Rochester has adopted the use of printed circuits in its electronic shop. This has reduced the time for wiring circuits by 50% and minimized wiring errors. Savings reported are realized in salaries and overhead alone. \$12

TYPE V - CURTAILMENT, REDUCTION, OR ELIMINATION OF
SUBPROGRAMS OR PROJECTS OR INSTALLATIONS
OF LOW UTILITY:

- *1. The Edgerton, Germeshausen and Grier Company added stops at 359 degrees to prevent complete rotation of camera tracking mounts. This permits the use of loose cabling, rather than expensive slip rings, to supply electrical current. \$30
2. The Lawrence Radiation Laboratory's use of reprints from scientific and technical journals in its recruitment program has been discontinued. They were found to be too expensive and could be replaced by small brochures. \$20

TYPE VI - IMPROVED MANAGEMENT METHODS:

1. Proper maintenance of various instruments, required that a factory serviceman spend an eight-hour day each month with a plant mechanic, servicing instruments on ovens and other plant equipment. By rotating the plant mechanics used with the factory servicemen, the mechanics have received enough training to maintain the instruments without the aid of the servicemen; thereby permitting cancellation of the annual service contract. \$ 1.6

Net Savings Estimated
for FY 1966
(in thousands of dollars)

TYPE VI - IMPROVED MANAGEMENT METHODS (cont'd)

2. A thorough study was made on each job classification and job requirement directed toward reducing the number of request for "Q" clearances if an "L" clearance would suffice. A program was also established to permit utilization of manpower on unclassified work prior to granting of "Q" or "L" clearances. Estimated savings for FY 1966 are \$27,000.

\$27

- *3. Improved techniques for reproducing drawings has been developed at the Oak Ridge Gaseous Diffusion Plant at a reduced cost. All engineering drawings are now reproduced by a Xerox printer in place of the "Díazo Process". Savings through the use of the printer are realized in areas as:

- (1) Reduced-size copies are made to satisfy both original and subsequent distribution requirements.
- (2) Expensive and slow autopositive operation has been eliminated.
- (3) More efficient reproduction processes are now possible as related to the effective use of cut-outs, paste ups and overlays.

\$32

PARTICIPATING CONTRACTORS FOR PERIOD
July 1, 1965 - December 31, 1965

ACF Industries	Mallinckrodt Chemical Works
Aerojet General Corporation	Management Services, Incorporated
Associated Universities, Incorporated	Mason & Hanger-Silas Mason Company
Battelle Memorial Institute	Massachusetts Institute of Technology
Beers, Roland F., Incorporated	Monsanto Research Corporation
Bendix Corporation	National Lead Company of Ohio
California, University of	North American Aviation Corporation
Catalytic Construction Company	Oak Ridge Associated Universities
Chicago, University of	Ohio Valley Electric Corporation
Combustion Engineering, Incorporated	Pan American World Airways, Inc.
Computer Sciences Corporation	Phillips Petroleum Company
Dow Chemical Company	Pitkin, Lucius, Incorporated
Douglas United Nuclear, Incorporated	Princeton University
Dupont, E. I., de Nemours & Company	Reactive Metals, Incorporated
Edgerton, Germeshausen & Grier	Reynolds Elec. & Eng. Co., Inc.
Ferguson, H. K., Company	Sandia Corporation
General Dynamics Corporation	Stanford University
General Electric Company	Tennessee, University of
Goodyear Tire & Rubber Company	Union Carbide Corporation
Harvard University	University of Rochester
Holmes & Narver, Incorporated	Vitro Engineering Company
Iowa State University	Wackenhut Services, Incorporated
Isochem, Incorporated	Westinghouse Electric Corporation
Jones, J. A., Construction Company	Zia Company, The
Kellogg, M. W., Company	

BAF-8 S
~~Report~~ Cont'd. Below

THE WHITE HOUSE

WASHINGTON

March 8, 1966

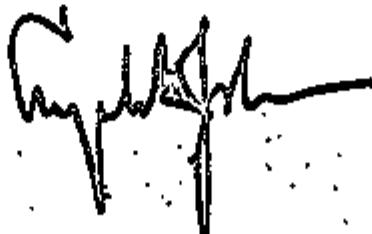
MEMORANDUM FOR CABINET OFFICERS AND HEADS OF MAJOR AGENCIES

Our balance of payments requires our continuing attention and concern. We achieved a substantial improvement in the overall deficit in 1965 and we look forward to further improvement this year.

Federal overseas transactions play an important role in our balance of payments, and for the past several years we have made a great effort to minimize the adverse impact that our Federal programs might have on our balance of payments. But the requirements associated with Vietnam, both for military and for economic assistance, now demand even greater vigilance in controlling our overseas Federal transactions.

Under the procedures which have been established to control the balance of payments impact of the Federal Government's overseas activities, you are scheduled to report by March 15 to the Bureau of the Budget on your agency's international transactions. I urge that you use this occasion to reexamine all of your overseas programs with the utmost care. Your objective should be to maximize receipts and to minimize expenditures abroad consistent with the achievement of U. S. objectives.

I have instructed the Director of the Bureau of the Budget to examine your reports carefully and to inform me promptly of the progress which is being made by each Federal agency in assisting the Nation to achieve equilibrium in its balance of payments.



cy filed BAF-8-Reports

BAF-8-3

Budget & Cost Reduction

Dear Charlie:

Our first semi-annual report of progress toward cost reduction goals has been prepared and is forwarded herewith as required by BOB Circular A-44.

The report reflects results from reviews of the Atomic Energy Commission's programs during the past several months as well as dollar and manpower savings resulting from numerous other actions taken by AEC management to increase productivity and efficiency. Our goals for FY 1966 have been increased by about \$23 million and for FY 1967 by about \$73 million. Based on progress to date, we expect to meet the revised goals.

A summary report of cost reduction actions taken by AEC's major cost-type contractors during the first half of FY 1966 is also attached. The reported actions are expected to save more than \$29 million during the year.

Cordially,

Walter F. Slaton

Chairman

bcc: Chairman Seaborg (2)
Commissioner Palfrey
Commissioner Ramey
Commissioner Tape
General Manager (2)
Secretariat (2)
General Counsel
AGMA
AGMPP
EAGM
AGM

The Honorable Charles L. Schultze
Director, Bureau of the Budget

Attachments:
Semi-Annual Report of Progress Toward
Annual Cost Reduction Goals
Cost Reduction Actions Taken by
AEC Contractors

PAR:D	PER	OC	Asst. to GM			
Slaton			Traynor			
2/ /66	2/ /66	2/ /66	2/ /66			2/ /66
OFFICE ▶	PAR:DD	AGMPP	EAGM	AGM	DGM	GM
SURNAME ▶	Manly:ck	Quinn	Vinciguerra	Ink	Bloch	
DATE ▶	2/ /66	2/ /66	2/ /66	2/ /66	2/ /66	2/ /66

3-1-66

U. S. ATOMIC ENERGY COMMISSION

COST REDUCTION AND MANAGEMENT IMPROVEMENT PROGRAM

SEMI-ANNUAL REPORT
OF PROGRESS TOWARD ANNUAL GOALS
AS OF MARCH 1, 1966
(Prepared pursuant to BOB Circular A-44)

In this semi-annual progress report, the updating of goals and the estimated results from actions taken during the past six months are described. The summary form specified in Circular A-44 is attached, along with examples of the actions which are yielding savings through "increases in productivity and efficiency".

Since the establishment of cost reduction and management improvement goals for FY 1966 and FY 1967, AEC programs and operations have been subjected to further reviews. In the review process, it was determined that further economies could be achieved in some programs and operations with the net result, reflected in detail in the report, that we have raised the goals. The total increase is about \$96,000,000 for the two years of which about \$23,000,000 is in FY 1966. Based on progress as of December 31, 1965, we fully expect to meet the revised goals.

A. Increased Productivity and Efficiency

A total of 226 specific actions have been taken toward reaching the goals established for this category. They will yield savings estimated at \$8,851,000 in FY 1966 and \$6,315,000 in FY 1967. Examples of the actions that lead to these savings are appended to this report. Reviews of operations caused both increases and decreases in previous estimates but overall brought to light opportunities that could lead to economies beyond those previously planned. As a consequence, we have increased our goals as shown in the following table.

	FY 1966		FY 1967	
	<u>Previous</u>	<u>Revised</u> (in thousands)	<u>Previous</u>	<u>Revised</u>
Reduce Operation and Assembly Cost	\$ 4,882	\$ 4,440	\$11,573	\$11,601
Reduce Materials Cost	5,556	7,229	1,167	2,015
Reduce Management Cost	872	1,658	710	1,749
Reduce Service Cost	<u>185</u>	<u>182</u>	<u>138</u>	<u>630</u>
	\$11,495	\$13,509	\$13,588	\$15,995

Factors in the increases and decreases within goals are:

Reduce Operation and Assembly Cost

-several changes, both up and down, took place in detailed actions supporting this category. The net effect is slightly down in FY 1966 and no significant change is reflected for this category in FY 1967.

A. Increased Productivity and Efficiency (cont'd)

Reduce Materials Cost

- developing and substituting an electronic emanating device in place of erecting shield structures around classified data processing equipment is saving \$1.27 million in FY '66.
- finding a way to substitute government owned tank cars for one-time storage of radioactive liquid products instead of erecting fixed storage tanks saved \$200,000.
- transferring fabricated nuclear components between users having unique requirements instead of having the materials turned in for reprocessing and re-manufacture saved \$245,000.

Reduce Management Cost

- using AIP during a special review of contractor proposed capital projects will save \$236,000 during FY '66.
- devising means for eliminating certain security guard requirements will save \$54,000.
- reorganizing contractors work forces to better meet the demands of a changed work load will save \$150,000 in FY '66 and \$810,000 during FY '67.

Reduce Service Cost

- implementing findings from a survey of communications equipment and usage is expected to save \$405,000 during FY '67.
- a changed requirement that eliminated the need for shared computer time and inability of a promising motor vehicle oil filter system to perform as expected eliminated projected savings of \$25,000 and \$14,000 respectively in FY '66.

Applicable data for this category is also reported on the format prescribed by Circular A-44, attached. As mentioned above, the appendix gives additional examples and more detailed information on these actions.

B. Elimination of Low Priority Activities, Substitution of Less Costly Alternatives; Reductions in Fund Requirements.

Progressive increases in estimates of budget reductions and savings have been made since our original report of annual goals was submitted. On September 15, 1965, in connection with submission of the FY 1967 budget estimates, and further consideration of AEC projects and programs from the standpoint of priority, alternatives, and other possible management actions to reduce funding requirements, the estimates of reductions and savings for FY 1966 and FY 1967 were increased to \$285 million and \$240 million respectively. As shown in the table below, these goals, after continuing reviews, have been increased again to the amounts shown in the columns indicated as "Revised".

	FY 1966 Reductions and Savings		FY 1967 Reductions and Savings	
	(In Thousands)			
	<u>Previous</u>	<u>Revised</u>	<u>Previous</u>	<u>Revised</u>
Raw Materials	\$ 50,968	\$ 50,968	\$ 97,953	\$ 97,953 #
Special Nuclear Materials	31,073	31,518	37,465	43,564 #
Weapons	47,749	51,566	31,707	61,569
Reactor Development	103,494	113,041	41,136	55,006
Physical Research	2,110	3,154	2,400	7,220
Biology and Medicine	2,075	2,075	2,305	2,305
Training, Education and Informa- tion	1,624	1,601	62	562
Isotopes	780	845	1,185	1,185
Community	40	40	200	200
Security Investigations	-	-	200	100
Increase or Decrease in Selected Resources	<u>45,170</u>	<u>51,586</u>	<u>25,500</u>	<u>40,880</u>
	\$285,083	\$306,394	\$240,113	\$310,544

Reductions in raw materials procurement and U-235 production costs are from FY 1965 levels; all other reductions are from immediately preceding fiscal year.

C. Application of Prior Year's Savings to Reduce Appropriation Requests

In addition to actions taken, included in budget estimates, and reflected in the preceding section B, the savings tabulated below, including the increase in the FY 1967 figures, have been effected. The funds have been applied to reduce future appropriation requests. This is a firm accomplishment as of 12/31/65.

	<u>FY 1966 Reductions and Savings</u>		<u>FY 1967 Reductions and Savings</u>	
	(In Thousands)			
	<u>Previous</u>	<u>Revised</u>	<u>Previous</u>	<u>Revised</u>
Application of Prior Year Savings to Reduce Approp- riation Requests	131,784	131,784	51,570	85,270

D. AEC Manpower Goal - Increased Productivity and Efficiency

The revised goal for improved utilization of AEC manpower follows:

<u>Full-Time Permanent Employment</u>					
<u>AEC Manpower Goal</u>	<u>Total</u>	<u>To be realized</u>			
		<u>In FY 1966</u>		<u>In FY 1967</u>	
		<u>Direction & Admin.</u>	<u>Other Direct Employment</u>	<u>Direction & Admin.</u>	<u>Other Direct Employment</u>
Eliminate positions	286	95	112	30	49
Redeploy positions	<u>144</u>	<u>95</u>	<u>19</u>	<u>30</u>	<u>0</u>
Reduction goal	142	0	93	0	49

Greater efforts in technical direction and control of research and development operations now require substantial augmentation of staff in several divisions and offices. These needs will require equivalent savings of positions in other activities. The previous estimate of 65 positions to be eliminated in direction and administration in FY 1966 is now revised

D. AEC Manpower Goal - Increased Productivity and Efficiency (cont'd)

to 95. The goal for reduction of positions in other direct employment is increased by one position to reflect the reductions achieved at the time of this report.

Achievement to December 31, 1965, Against the Previous Goals

<u>AEC Manpower Goal</u>	<u>In FY 1966</u>					
	<u>Total</u>		<u>Direc. & Admin.</u>		<u>Other Direct Empl.</u>	
	<u>Goal</u>	<u>Achieved</u>	<u>Goal</u>	<u>Achieved</u>	<u>Goal</u>	<u>Achieved</u>
Eliminate Positions	176	182	65	70	111	112
Redeploy Positions	83	89	65	70	18	19
Reduction	93	93	0	0	93	93

In the reporting period, seventy positions have been eliminated by improved utilization of manpower in direction and administration of AEC programs.

New positions which were provided as a result of these economies were principally engineers required for technical direction of research and development operations in the reactor and isotopes development programs. The critical need for further increases in these areas will require further redeployment of positions as soon as conditions permit.

SUMMARY REPORT
COST REDUCTION AND MANAGEMENT IMPROVEMENT PROGRAM

Goal for increased
productivity and efficiency

U. S. ATOMIC ENERGY COMMISSION
Date March 1, 1966

Goals and Planned Efforts to Achieve Them (1)	Annual Savings Goals				Estimated Annual Savings from Actions in Reporting Year						Other Bene- fits (12)	Proposed Use of Savings- Use Key (13)
	Positions		Dollars (in thousands)		Positions			Dollars (in thousands)				
	CY (2)	NY (3)	CY (4)	NY (5)	CY (6)	NY (7)	BNY (8)	CY (9)	NY (10)	BNY (11)		
A. INCREASED PRODUCTIVITY AND EFFICIENCY												
1. <u>Reduce Operations and Assembly Cost</u> Evaluation of operating plans and practices, developing alternate methods, introducing technological improve- ments.			4,882 4,440	11,573 11,601				2,396	3,151			D
2. <u>Reduce Materials Cost</u> Specifying less costly materials, buying at minimum cost and im- proving procurement techniques.			5,556 7,229	1,167 2,015				5,368	975			D
3. <u>Reduce Management Cost</u> Reorganization and con- solidation of functions and use of lower cost space by contractors and AEC.			872 1,658	710 1,749				910	1,670			D

SUMMARY REPORT
COST REDUCTION AND MANAGEMENT IMPROVEMENT PROGRAM

Goal for increased
productivity and efficiency

U. S. ATOMIC ENERGY COMMISSION
Date March 1, 1966

Goals and Planned Efforts to Achieve Them (1)	Annual Savings Goals				Estimated Annual Savings from Actions in Reporting Year						Other Bene- fits (12)	Proposed Use of Savings- Use Key (13)
	Positions		Dollars (in thousands)		Positions			Dollars (in thousands)				
	CY (2)	NY (3)	CY (4)	NY (5)	CY (6)	NY (7)	BNY (8)	CY (9)	NY (10)	BNY (11)		
4. <u>Reduce Service Costs</u> Restricting travel, usage of vehicles, reducing cost of ADP, and further austerity in level of services.			185 182	138 630				177	\$19			D
TOTALS			13,509	15,995				8,851	6,315			

Savings Key:

- A. Use to finance increased costs, such as pay increases.
- B. Apply to production of more units of work.
- C. Apply to raise quality of service or performance.
- D. Use to finance some other approved program or activity.
- E. Place in reserve, or apply to reducing President's budget.

U. S. ATOMIC ENERGY COMMISSION

APPENDIX TO SEMI-ANNUAL REPORT
OF PROGRESS TOWARD ANNUAL GOALS
AS OF MARCH 1, 1966

Examples of cost reduction actions taken, or underway, to achieve goals under Category A - Increased Productivity and Efficiency

- *1. The Idaho Operations Office has initiated an electrical power demand study encompassing all facilities at the National Reactor Testing Station. When completed, careful scheduling of electrical loads will keep the total requirement below the upper limit of contract demand. The anticipated savings are \$20,000 per year effective FY '67 based on tests and partial schedules saving \$3,000 during FY '66.
2. A new one-time program at Savannah River produced a large quantity of radioactive thorium nitrate solution that required storage for 6 months until radioactivity had decayed enough to permit shipping to another site for further processing. The contractor was ready to start construction on a \$200,000 storage tank and related equipment facility when Operations Office personnel thought of investigating availability of government owned tank cars. Sufficient surplus tank cars were located and qualified for the purpose saving virtually all of the \$200,000.
3. The Division of Technical Information now supplies depository libraries with 100% micronegative collections of AEC research and development reports. This permitted a decrease in the number of printed copies of reports to effect the same distribution resulting in an FY 1966 savings of \$227,000.
4. The San Francisco Operations Office has worked out a means of transferring 56 kg of U-235 from the Lawrence Radiation Laboratory to the Defense Atomic Support Agency to meet a special need. The AEC saved \$90,000 in costs of reprocessing and related costs that would have been incurred to recover and return this material to the AEC production stream. In addition, DASA will save about \$385,000 in various costs including fabrication and uranium scrap reprocessing.
5. Routine assays of depleted uranium had been performed for security purposes rather than to meet technical requirements. Through declassification action this operation was eliminated saving \$22,000 annually.
6. Contractor employees had been required to pick up payroll checks at the on-site banking facility where the time lost in waiting lines represented an annual cost of \$22,000. Payroll checks are now distributed directly to employees or a designated bank.

* Actions which might be applicable to the operations of other government departments and agencies.

7. By more intensive review of the relationship between vital program objectives and the immediate purposes of the overtime request, the Schenectady Naval Reactors Office, for example, expects through tightening up on approvals of contractor requests for overtime, to save \$245,000.
8. The Office of the Controller successfully negotiated a reduction in the cost to the AEC of a contractors pension plan by \$183,000 annually.
- *9. Personnel of the AEC Division of Security patented an electromagnetic shielding around equipment that processes classified information. Installation of this device saved the AEC \$1,271,400 during the first half of FY '66. By supplying seven of these devices to other agencies the government saved an additional \$28,000 during the same time. One hundred fifty additional units are planned in connection with the proposed Secure Data Transmission System that will save about \$585,000.
- *10. A contractor had been paying all invoices daily as received and approved. Procedures were changed to pay invoices subject to discount on the due date and to pay net invoices once each month. This reduced the number of checks approximately 18,000 per year with resultant saving of about \$2,700 in typing and mailing costs.
- *11. The standard clothing allowance for AEC firemen at NRTS provided for a dress uniform. It was determined that occasions requiring a dress uniform were almost non-existent therefore this portion of the clothing allowance was dropped.
12. Albuquerque Operations Office has been participating with a contractor during the procurement cycle to gain fuller use of value engineering and government excess property lists. Seven actions yielded savings of \$120,000.
13. Schenectady Naval Reactors Operations Office reviewed the number of contractor personnel performing nuclear materials control functions and believed them excessive. By working with the contractor, the 16 man staff was reduced to 7 people.
14. The New York Operations Office, during its review of facility utilization, determined that 4 marginal air sampling sites could be shut down saving \$12,000 this year and \$45,000 annually thereafter.
15. A review of stocks on hand for 76 preprinted forms disclosed that the supply of 15 of the forms was excessive. The reproduction supervisor imposed revisions of economic order quantities.
- *16. The Nevada Operations Office had medical service for its cost type contractors consolidated so that all qualify for reduced State Workmen's Compensation insurance premiums thereby saving \$46,000 per year.

17. The regulatory procedures of the AEC have been simplified to reduce the time between application for, and the issuance of, a license.

The appeal procedures have been simplified by eliminating the need to petition the AEC for permission to file an appeal. New appeals can be filed directly.

The average time for the Atomic Safety and Licensing Board to issue a decision following a hearing had been 50 days. The use of new simplified procedures cut this time to 21 days in the Dresden II case.

18. A contractor had been paying an extra day's pay for holidays falling on a Saturday. The Savannah River Operations Office instructed the contractor to make the Friday preceding the holiday a day off with pay, excepting the work force needed to maintain continuous and high-priority production, to save \$80,000 in FY 1967.
- *19. AEC reviewed the costs of, and unusual circumstances behind, securing a particular area and determined that the security action was excessive. Savings of \$54,000 resulted.
20. The AEC turned in newly excessed tungsten with current market value of \$290,000 and mercury with current market value of \$2.3 million to the G.S.A. This represents a return of appreciated assets to the government, but is not reported as an AEC saving.

U. S. Atomic Energy Commission

Summary Report of Cost Reduction Actions
Taken by Participating Contractors
July 1, 1965 - December 31, 1965

This summary report of cost reduction actions taken by AEC's larger cost-type contractors during the semi-annual period ending December 31, 1965, reflects more than a 16% increase in actions taken and more than an 11% increase in reported savings as compared with the period ending June 30, 1965. The average dollar value of first year savings per action continued to decrease. Taken together, these three items indicate the greater effort being put forth to achieve further economy. The contractors are meeting the continuing challenge by the President and are producing praiseworthy results.

The number of actions taken and the savings reported by the participating contractors are shown in the table below. Following the table is a list of selected examples of cost reduction actions taken during the period. The examples which might be useful to other agencies have been identified.

	No. of Actions During Period	Estimated Savings Realized 7-1-65 12-31-65	Estimated Carry-Forward Benefits 1-1-66 6-30-66	Total For FY 1966
		(in millions)		
1. Conducting programs on a more austere basis	874	\$ 5.83	\$2.47	\$ 8.30
2. Utilizing less expensive materials and components	482	3.26	.78	4.04
3. Buying at minimum cost	972	7.25	1.38	8.63
4. Installing technological and process improvements	424	2.11	1.77	3.88
5. Eliminating projects of low utility	22	.17	.04	.21
6. Improving management methods	291	1.70	1.48	3.18
7. Other	<u>54</u>	<u>.75</u>	<u>.06</u>	<u>.81</u>
Summary Total	3,119	\$21.07	\$7.98	\$29.05

U. S. Atomic Energy Commission

- - - -

Selected Examples of Cost Reduction Actions
Taken by Participating Contractors
July 1, 1965 - December 31, 1965

Examples selected from 3,119 deliberate actions taken by AEC's cost-reimbursement contractors during the six-month period ending December 31, 1965, are listed below. With the examples are estimates of the savings anticipated during fiscal year 1966 from each action taken to achieve economy and efficiency in AEC contract operations.

Net Savings Estimated
for FY 1966
(in thousands of dollars)

TYPE I - CONDUCTING APPROVED PROGRAMS ON A MORE
AUSTERE BASIS:

- *1. The Savannah River Plant News, which is issued 26 times per year, was changed from letter press printing to offset printing. Savings of \$255.00 per issue resulted. \$ 6
2. Design specifications for repair of biological seals around certain reactors at Savannah River specified packing the space around piping penetrating the seal with lead wool and then pouring on a polyurethane sealing compound. A DuPont construction engineer reasoned that under operating conditions the piping would expand, squeezing the lead wool into an acceptable seal. After actual tests proved the feasibility of the idea, the requirement for polyurethane compound was deleted. \$ 6
- *3. The painters in the mechanical shops at the Lawrence Radiation Laboratory are now using a recently marketed bond-release type paint remover for removing paint on electrical panels. This work was previously done by sanding machines. This new method saves time, and results in a superior job. \$ 2

*Actions which might be applicable to the operations of other government departments and agencies.

TYPE I - CONDUCTING APPROVED PROGRAMS ON A MORE
AUSTERE BASIS (cont'd)

- *4. A new modular electronic test equipment system has been devised to eliminate duplication in design and drafting. This system allows the designer to select proven modules and to design a system by combining these modules. This leads to standardization of designs in the field, simplifies maintenance, and eliminates drafting and fabrication of each new test system. The savings realized are 50% of the design and drafting time. \$25
5. GSA sold at a public auction a surplus lathe which had been decontaminated by the Dow Chemical Company. Previously, contaminated lathes had been disposed of as waste. \$ 5
6. A new policy for the thorough evaluation of electronic calculators' capabilities prior to purchase has been established in the High Energy Physics Division at Argonne National Laboratory. The costs of calculator purchases are being reduced without lowering the performance of the basic work requirement. \$ 5
7. At the Oak Ridge Gaseous Diffusion Plant there is a frequent need for cleaning the outside air intake filters, to provide adequate air flow to cool compressor motors. An emergency fire engine was modified to permit use of its pumper in the washing of the filters, a job previously done by labor crews. This resulted in cleaner filters, reduced the frequency of cleaning, and permitted diversion of labor to other essential work. \$ 7

TYPE II - SPECIFYING OR UTILIZING LESS EXPENSIVE
MATERIALS AND COMPONENTS:

- *1. The Sandia Corporation has developed a standard cover which will be used on all future publications. Significant savings will be realized in the areas of cover design, makeup, stock storage, and illustrators concepts and approval. \$10

TYPE II - SPECIFYING OR UTILIZING LESS EXPENSIVE
MATERIALS AND COMPONENTS.. (cont'd)

- *2. Savings of \$54,000 per year are projected as a result of the development of an improved method of mounting large precision mirrors in spark chambers. The accepted past practice had been to use a vacuum chuck, but small bumps on the surface of the mirror could not be eliminated. The process developed at Argonne National Laboratory involves use of fine adjusting screws attached to the mirror backs with epoxy adhesive. Fifteen mirrors now being made will incorporate this new method of insuring flatness. These mirrors are expected to give more satisfactory performance, and the process will reduce not only the cost of fabricating the mirrors but the cost of tuning the spark chambers in which the mirrors are installed. \$54
3. Superconducting magnets require only a fraction of the electrical power needed to operate a conventional magnet of similar capacity. One aspect of a development program for such magnets involved the production of suitable cable for use in winding the magnets. Argonne National Laboratory staff members were successful in converting a conventional lathe into a special cable-forming machine. Use of this modified machine doubled production of the cable and is expected to result in savings of \$10,000 per year. \$10
- *4. The present process for preparing Vu-Graphs of oscilloscope wave forms on Polaroid positive prints requires the use of technical art facilities and labor. Sandia found that the normally discarded negative of a Polaroid film can be used to make Xerox or Thermofax reproductions that are satisfactory for most applications. This process enables the engineer to obtain a Vu-Graph in much less time than by previous methods. The dollar savings entered are based on one Division only. \$ 1

TYPE II - SPECIFYING OR UTILIZING LESS EXPENSIVE
MATERIALS AND COMPONENTS (cont'd)

- *5. Savings have been made by using less expensive methylene chloride instead of Freon for cleaning components at various stages in final assembly operations. \$ 5
6. As a part of the finally negotiated contract for a data processing system, the supplier agreed to furnish General Electric assistance, without charge, to convert existing computer programs to the new system. During the current six months approximately 5,000 programming man-hours of assistance were received. \$15
7. An office-type offset copy machine (Multilith 85) was procured to reproduce multiple copies previously reproduced by diazo process and Xerox 914. In the area serviced by these machines, over 32,000 copies are required each month. Offset copies (at \$.0025 per copy) produced a savings of approximately \$500 per month over diazo (at \$.015 per copy) and Xerox (at \$.05 per copy). The new machine was amortized in 3 months. \$ 6
- *8. Data processing cards, with transparent Mylar film mounted into an aperture may be substituted for standard glass slides at the Oak Ridge National Laboratory for the viewing of biological tissues. The tissues are mounted directly on the Mylar. The data pertaining to each specimen is recorded on the same card, providing a permanent record, which can be machine processed. This process is 3 steps shorter than the glass slide process, reducing manpower requirements. Material cost for aperture cards with Mylar inserts is estimated at one-fiftieth that of glass slides. Net savings have not yet accrued from this idea but it is cited for consideration by other laboratories.
9. The Advanced Test Reactor (ATR) critical facility simulates the nuclear characteristics of the ATR itself which has hafnium as the poison in the control rods. However, determination of the correlation between hafnium and cadmium made it possible to use the less costly cadmium in the ATR critical facility without impairing its operation or the data generated. \$51

Net Savings Estimated
for FY 1966
(in thousands of dollars)

TYPE II - SPECIFYING OR UTILIZING LESS EXPENSIVE
MATERIALS AND COMPONENTS (cont'd)

10. In efforts to reduce costs, management of the Princeton Pennsylvania Accelerator (PPA) secured from Brookhaven National Laboratory sufficient quantities of deuterium gas to support recent experimental needs. Although Brookhaven's gauges were not capable of measuring the purity desired, the product was found to be completely useful. Commercial sources quoted PPA a price which was six times that of Brookhaven's. \$18
11. During 1964, repair work on a heavy water plant at Savannah River entailed sand-blasting 12 large distillation columns down to clean metal. New work authorized in 1965 involved the sandblasting of 12 additional columns. Using experience gained, a 50-ton automatic discharge sand silo was purchased to obtain economies of purchasing blasting sand in bulk plus the elimination of manual sand handling. A net saving of \$16,000 will result. \$16
12. At Savannah River, twenty-one cadmium reactor control rods have been replaced with cobalt 59 rods. In addition to being utilized as control rods, the cobalt 59 rods are used as the source of producing the useful isotope, cobalt 60. \$64
13. Fuel materials for nuclear plants are subjected to various tests to insure integrity under operating conditions. In preparation of experimental samples of fuel material for testing it is necessary to separate bulk ceramic fuel powders from impurities. At the Bettis Atomic Power Laboratory this has been achieved by putting the material into solution and pouring it through expensive porous glass filtering funnels. A technical study was initiated to develop a less

TYPE II - SPECIFYING OR UTILIZING LESS EXPENSIVE
MATERIALS AND COMPONENTS (cont'd)

13. (cont'd)

expensive method and it was found that a satisfactory separation could be obtained by using a centrifuge with consequent savings in material and labor cost.

\$ 8

TYPE III - BUYING AT MINIMUM COST CONSISTENT WITH
PROGRAM NEEDS:

1. Argonne National Laboratory's electric bill will be reduced by about \$100,000 per year as a result of a cooperative effort on the part of Commonwealth Edison Company, the Illinois Commerce Commission and Argonne. In 1964, Argonne initiated discussions with the utility firm in an effort to secure lower rates. In December, 1965, these discussions culminated in ICC approval of a reduction in Edison's rate from .91¢ per kWh to .864¢ per kWh. Other Chicago-area users of large amounts of power also will benefit from the rate cut. It is estimated that the new rate, which became effective in mid-December, 1965, reduced the Laboratory's costs by \$3,000 in the final weeks of 1965 and that savings of about \$50,000 will be realized in the first six months of 1966.
2. Heretofore, National Lead Company of Ohio used mold cups fabricated from a large single piece of graphite. When the cup eroded or chipped it had to be replaced. Now a two piece cup, made up of a base which is the largest piece and can be made from scrap graphite and used indefinitely because it does not come in contact with the metal, and a top, which is a thin piece of graphite machined to produce whatever preshape is desired on the ingot. In normal casting operations, only the thin top section will have to be replaced regularly. The two-piece cup has been adopted for normal and enriched ingots and is proposed for Mark V ingots in the near future.
3. A total of 11,000 gallons of surplus oil costing \$.08 a gallon was bought to be used for spraying intake filters at the Paduach Plant instead of using oil costing \$.38 a gallon.

\$53

\$12

\$ 3

TYPE IV - ACCELERATING INSTALLATION OF TECHNOLOGICAL
AND PROCESS IMPROVEMENTS DESIGNED TO REDUCE
OPERATING COSTS (cont'd)

4. The installation of a molecular sieve bed for purifying oil at the Oak Ridge Y-12 Plant saves \$4,000 annually in operating costs. It was found that oil containing free water plus 6,000 ppm dissolved water and an acid number of 0.80 could be cleaned up by sieve treatment to a respectable 80 ppm dissolved water and a 0.02 acid number. This treatment replaces the conventional flash vaporization and clay filtration system. \$ 4
5. The University of Rochester has adopted the use of printed circuits in its electronic shop. This has reduced the time for wiring circuits by 50% and minimized wiring errors. Savings reported are realized in salaries and overhead alone. \$12

TYPE V - CURTAILMENT, REDUCTION, OR ELIMINATION OF
SUBPROGRAMS OR PROJECTS OR INSTALLATIONS
OF LOW UTILITY:

- *1. The Edgerton, Germeshausen and Grier Company added stops at 359 degrees to prevent complete rotation of camera tracking mounts. This permits the use of loose cabling, rather than expensive slip rings, to supply electrical current. \$30
2. The Lawrence Radiation Laboratory's use of reprints from scientific and technical journals in its recruitment program has been discontinued. They were found to be too expensive and could be replaced by small brochures. \$20

TYPE VI - IMPROVED MANAGEMENT METHODS:

1. Proper maintenance of various instruments, required that a factory serviceman spend an eight-hour day each month with a plant mechanic, servicing instruments on ovens and other plant equipment. By rotating the plant mechanics used with the factory servicemen, the mechanics have received enough training to maintain the instruments without the aid of the servicemen; thereby permitting cancellation of the annual service contract. \$ 1.6

Net Savings Estimated
for FY 1966
(in thousands of dollars)

TYPE VI - IMPROVED MANAGEMENT METHODS (cont'd)

2. A thorough study was made on each job classification and job requirement directed toward reducing the number of request for "Q" clearances if an "L" clearance would suffice. A program was also established to permit utilization of manpower on unclassified work prior to granting of "Q" or "L" clearances. Estimated savings for FY 1966 are \$27,000. \$27

- *3. Improved techniques for reproducing drawings has been developed at the Oak Ridge Gaseous Diffusion Plant at a reduced cost. All engineering drawings are now reproduced by a Xerox printer in place of the "Diaz Process". Savings through the use of the printer are realized in areas as:
 - (1) Reduced-size copies are made to satisfy both original and subsequent distribution requirements.
 - (2) Expensive and slow autopositive operation has been eliminated.
 - (3) More efficient reproduction processes are now possible as related to the effective use of cut-outs, paste ups and overlays. \$32

PARTICIPATING CONTRACTORS FOR PERIOD
July 1, 1965 - December 31, 1965

ACF Industries	Mallinckrodt Chemical Works
Aerojet General Corporation	Management Services, Incorporated
Associated Universities, Incorporated	Mason & Hanger-Silas Mason Company
Battelle Memorial Institute	Massachusetts Institute of Technology
Beers, Roland F., Incorporated	Monsanto Research Corporation
Bendix Corporation	National Lead Company of Ohio
California, University of	North American Aviation Corporation
Catalytic Construction Company	Oak Ridge Associated Universities
Chicago, University of	Ohio Valley Electric Corporation
Combustion Engineering, Incorporated	Pan American World Airways, Inc.
Computer Sciences Corporation	Phillips Petroleum Company
Dow Chemical Company	Pitkin, Lucius, Incorporated
Douglas United Nuclear, Incorporated	Princeton University
Dupont, E. I., de Nemours & Company	Reactive Metals, Incorporated
Edgerton, Gernsmausen & Grier	Reynolds Elec. & Eng. Co., Inc.
Ferguson, H. K., Company	Sandia Corporation
General Dynamics Corporation	Stanford University
General Electric Company	Tennessee, University of
Goodyear Tire & Rubber Company	Union Carbide Corporation
Harvard University	University of Rochester
Holmes & Narver, Incorporated	Vitro Engineering Company
Iowa State University	Wackenhut Services, Incorporated
Isochem, Incorporated	Westinghouse Electric Corporation
Jones, J. A., Construction Company	Zia Company, The
Kellogg, M. W., Company	

MAF-8
Cont Ref

Dear Mr. President:

A report on AEC cost reduction actions taken during the first half of fiscal year 1966 has been sent to Mr. Charles Schultze as you have requested.

Since the establishment of cost reduction and management improvement goals for FY 1966 and FY 1967, AEC programs and operations have been subjected to further reviews. In the review process, it was determined that further economies could be achieved in some programs and operations with the net result, reflected in detail in the report, that we have raised the goals. The total increase is about \$96,000,000 for the two years, of which about \$23,000,000 is in FY 1966. Based on progress to date, we expect to meet the revised goals.

In addition, we have sent to Mr. Schultze a summary report of cost reduction actions taken by AEC's major cost-type contractors during the first half of FY 1966. I am sure you will be gratified to note that the report of their activity reflects more than a 16 percent increase in actions taken and more than an 11 percent increase in savings as compared with the previous six-month period.

Respectfully yours,

The President
The White House

~~(Signed) (Date 7. 6. 66)~~ bcc: Chairman Seaborg (2)
Chairman Commissioner Palfrey
Commissioner Ramey
Commissioner Tape
General Manager (2)
Secretariat (2)
General Counsel
AGMA EAGM
AGMPP AGM

PAR:DD Manly 2/ /66	PAR:D Slaton 2/ /66	PER 2/ /66	OC 2/ /66	Asst. to GM Traynor 2/ /66	AGMA 2/ /66
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OFFICE	PAR:PC	AGMPP	EAGM	AGM	DGM	GM
SURNAME	Palmer:ck	Quinn	Vinciguerra	Ink	Bloch	
DATE	2/ /66	2/ /66	2/ /66	2/ /66	2/ /66	2/ /66

3-1-66

GT file
BAP-8
Cost Reduction

W. H. Slaton, Director
Division of Plans and Reports

February 10, 1966

15/ F. T. Hobbs
Acting Secretary

COST REDUCTION PROGRAM - OFFICE OF THE SECRETARY

In accordance with your memorandum of December 10, 1965 on the above subject, the Office of the Secretary submits a negative report for the six month period ending December 31, 1965.

OFFICE	SECY.	SECY.				
SURNAME	McKinney:d	Hobbs				
DATE	2/10/66	2/10/66				

DATE:

INDEX: Budget 8 Cost Reduction
Budget 8 Cost Reduction

TO:

FROM:

SUMMARY: AEC 1213 - SUMMARY OF SURVEY OF HEADQUARTERS REPORTS AND REPORTING
REQUIREMENTS - The above is part of the AEC Cost Reduction
Program.

FILED: O&M 8 Reports

INDEXER: date of paper: 2- 8-66

REMARKS:

CONFIRMED TO BE UNCLASSIFIED
DOE NSI DECLASSIFICATION REVIEW E.O. 12958
BY: SP-5A PM 8-22-97 ODMH-023
THIS PAGE ONLY

U. S. ATOMIC ENERGY COMMISSION

CORRESPONDENCE REFERENCE FORM

DATE:

INDEX: BUDGET 8- REDUCTION PROGRAM

TO:

FROM:

SUMMARY: AEC 688/19. ARTICLE FROM DECEMBER 17, 1965 ISSUE OF SANDIA CORPORATION
LAB NEWS. As an example of early results from an organized
management-supported cost reduction program.

FILED: I&P 6- Articles.

INDEXER: date 1-5-66

REMARKS:

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DOE NSI DECLASSIFICATION REVIEW E.O. 12958
BY: SP EAPM 4-22-99 DORNN-523

U. S. ATOMIC ENERGY COMMISSION

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CORRESPONDENCE REFERENCE FORM

1-5-66

Budget - 8 - Cost Reduction

GENERAL SERVICES ADMINISTRATION

Washington 25, D. C. 20405

JAN 9 1966



Honorable Glenn T. Seaborg
Chairman
Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Chairman:

The President's continuing emphasis on cost reduction in the Federal Government, and the responsibility and willingness which all of us share in supporting him in this objective, has prompted a study in the General Services Administration of telephone instruments, associated equipment, and related costs.

We think that we should share the results of this study with the heads of all Federal agencies in the belief that it will enable your agency to help reduce its communications costs and thereby contribute to the President's cost reduction program.

As a result of the application of the standards set forth in GSA Bulletin FPMR No. F-10 of October 21, 1965, a copy of which is attached, General Services Administration has reduced its telephone equipment costs by approximately \$118,000 nationally on an annually recurring basis. In so doing, it has not interfered in any way with the fulfillment of the various program responsibilities assigned to this agency. Most of these economies were attributable to the application of realistic standards to determine the required number of access lines, call directors, speaker phones, intercom systems, hot lines, buzzers, lights, bells, color, and other related services offered by the telephone companies.

While several agencies have requested assistance from us since the issuance of the above-mentioned bulletin, it is rapidly becoming apparent that greater and more expeditious results can be obtained if the attention of the responsible people in your particular agency can be focused on this cost reduction area. Therefore, on January 18, 1966, a telephone equipment cost reduction symposium will be held in the GSA Auditorium. A detailed announcement will be forwarded to you within the next few days. However, it should be emphasized that those who participate in this symposium should be the equivalent of a

1-3-66

division director or above in your Administrative Services Division, or similar organizational component, with responsibilities for administrative services activities at all departmental and field levels.

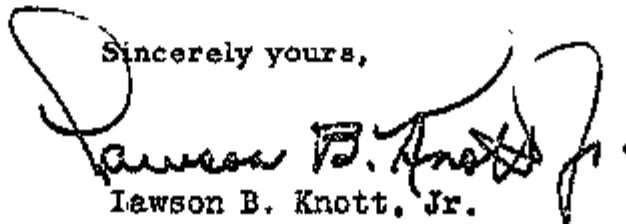
Thereafter, you will be asked to designate representatives who can participate in a more intensive and definitive course which will include survey techniques, suggested forms, types of equipment involved, and other pertinent considerations. It is necessary that these people be furnished by your agency to ensure the full participation of your agency in this cost reduction effort and also to ensure that the telephone instrument surveys and change orders resulting therefrom are compatible with the programs of your agency and your judgment as to the types of telephone tools required to fulfill your respective program responsibilities. In addition, continuing action by your agency is necessary if gradual increases in extra equipment are to be avoided.

It is planned that General Services Administration will provide continuing support to your agency in this endeavor at both the departmental and field levels but, understandably, there are limitations as to the extent of our resources in this area. Fortunately, we are confident that your designated representatives, with some guidance from our staff and publications, can develop the capability to enable your department or agency to share in this cost reduction effort.

From our experience in General Services Administration, we know that this program can succeed only if it has support at the level of the agency head. For example, the Administrator's office in General Services was the first office surveyed and the first office for which reductions in telephone equipment were ordered. Your personal interest and support of this program, therefore, will not only be appreciated but is considered essential to its success.

Questions concerning any portion of the foregoing, or in connection with the telephone cost reduction symposium scheduled for January 18, 1966, may be directed to Dr. Charles A. Ullmann, Director, General Services Administration Institute, Room 1149, General Services Building, Washington, D.C. 20405, (Code 183-4848), or to Mr. Robert B. Conrad, Commissioner, Transportation and Communications Service, (Code 183-5246).

Sincerely yours,


Lawson B. Knott, Jr.
Administrator

Attachment

October 21, 1965

GSA BULLETIN FPMR NO. F-10
TELECOMMUNICATIONS AND PUBLIC UTILITIES

TO : Heads of Federal Agencies

SUBJECT: Tentative Standards and Guidelines for Use by Executive
Agencies in Telephone Equipment Surveys

1. Purpose. This bulletin makes available for agency use the standards and guidelines used by GSA in conducting surveys of telephone station equipment and use.

2. General.

a. GSA Bulletin FPMR No. F-8, dated August 16, 1965, recommended that executive agencies conduct periodic telephone station equipment and use surveys in the interest of obtaining the maximum efficiency and economy in the use of such equipment.

b. GSA has developed standards and guidelines for determining telephone requirements within the agency which are being used in the conduct of its internal surveys. The application of these standards and guidelines has resulted in substantial reductions in payments for telephone service with no reduction in efficiency or effectiveness of operations.

c. It is intended that, based upon its own experience and that of other agencies, GSA will develop and promulgate a set of Government-wide standards within the Federal Property Management Regulations. This action should be completed by June 30, 1966.

d. Several executive agencies have requested assistance in developing the standards they should use in conducting their internal surveys of telephone equipment. Pending the development of the final standards, the standards currently being used within GSA are published in the attachment to this bulletin as tentative standards which the executive agencies may use for purposes of conducting their own surveys.

3. Recommended actions to be taken in application of standards.

a. Application of standards to specific activities involves a certain

Attachment

degree of judgment in that the standards cannot provide for every condition that will be encountered.

b. Retention of equipment not permitted by the standards should be justified to and be approved by personnel at bureau or service level or, in the case of field offices, by the principal official in the area.

4. GSA assistance and advice. GSA, upon request, will provide advice and guidance on methods and procedures to be followed in conducting agency surveys. Agencies are encouraged to discuss their plans with GSA prior to initiating their survey schedules. All requests for advice or consultative services should be made to James H. Lewis, Interdepartmental Dial Code 183, extension 4128 (343-4128).

5. Recommendations for Government-wide standards. It is requested that executive agencies submit recommendations for such revision or modification of the attached tentative standards, as they deem appropriate, for development of Government-wide standards. In addition, agencies are requested to advise GSA as to the savings achieved through their telephone equipment surveys. The information requested should be forwarded to the General Services Administration, Transportation and Communications Service, Planning and Requirements Division, Washington, D. C. 20405.

6. Expiration Date. This bulletin expires June 30, 1966.



ROBERT B. CONRAD

Commissioner

Transportation and Communications Service

GSA BULLETIN FPMR NO. F-10
TELECOMMUNICATIONS AND PUBLIC UTILITIES
ATTACHMENT A

PART 1. INTRODUCTION

1. DESCRIPTION OF TELEPHONE FACILITIES AND SERVICES. Each employee authorized to order or procure communications services or facilities shall be responsible for the procurement of equipment covered by the standards contained in Part 2, in a manner most advantageous to the Government in terms of economy, efficiency, and service.

For estimating purposes, one primary line for each three employees can be used as a guide. Since the function of the office will determine actual requirement more accurately, the standards and guidelines should be applied in preparing requisitions for installation or change of facilities, in analyzing such requests and in conducting utilization surveys.

The principal types of telephone equipment and related features and services utilized by GSA are described as follows:

- a. Private Branch Exchange (PBX). A switchboard, manual or automatic dial, requiring an attendant and operated by other than the telephone company.
- b. Secondary Switching Equipment. Key systems or switchboards, normally located on desks or at working locations, used for secretarial interception of incoming traffic for more than one telephone line. This type of equipment includes multi-button telephones which provide access to more than one line, regardless of local telephone company nomenclature.
- c. Telephone Instruments. A telephone instrument connected to a PBX or directly to the telephone company is referred to as a main station. Additional telephone instruments connected to a main station are referred to as extension stations and share the facility of the main station.
 - (1) Straight Station. A main or extension station which provides one communicating path.

(2) Key Station. A main or extension station, equipped with push buttons, providing access to more than its own line. These are normally provided with six buttons and may provide call holding and line illumination. The 6051 type key equipment is available in most companies where a capacity of up to 12 buttons is required. This type of equipment carries additional charges.

(3) Call Director. An instrument with capacity up to 36 push buttons and in most cases having a higher cost than 1 and 2 above. This type of instrument is primarily a secretarial type piece of equipment. Key systems utilizing these instruments usually are quite costly.

(4) Automatic Dialing Equipment. Equipment which provides automatic dialing by means of a pre-programmed rotary file or selection of a card for automatic calling.

(5) Speakerphones. An instrument which includes a microphone and loud speaker which permits group participation in a conversation. Locations designated for the use of this equipment may require acoustical treatment to obtain satisfactory results.

(6) Miscellaneous Instruments. Other instruments, provided by most telephone companies, such as wall phones, hanging hand sets, elevator phones, Princess and color telephones, etc. These instruments usually are more expensive than the conventional straight stations but provide no substantial improvement in quality of service.

d. Lines.

(1) Primary Line. The facility which connects the main station to the switchboard or automatic dial equipment and provides the communicating link. These are identical with an extension number from the main system and are associated with at least one specific station.

(2) Station Line. The facility which provides additional communications paths to a specific individual key station. In most cases this type of line has the same cost as the primary line and despite the fact it does not have its own instrument, necessitates installation of additional cost key equipment on the main station.

(3) Individual Business Lines. A direct connection to the telephone company's commercial system. This type of line may provide metered (message rate) service or flat rate (unlimited local) service.

(4) Intercommunicating Line. An interior line for direct intercommunication between two or more telephones. This capability is normally provided through the PBX and lines of this type should only be used between secretaries and principals or between two or more points with an extremely high amount of traffic.

e. Special Features and Equipment. The various telephone companies offer a wide variety of special features and equipment. These range from flashing light signals on key type instruments to special amplification systems, loud bells, and chimes, transmitter cut-off switches, service observing cabinets and recorded announcement equipment. They include seldom required and often expensive systems which automatically answer, hold and stack incoming calls when the called party is busy on other lines, and the calls are put through in approximate order of receipt when the line is available.

These special features and equipment are usually relatively inexpensive on an individual basis, but require other features in varying degree in order to operate, which the aggregate may amount to substantially increased charges.

2. APPLICATION OF STANDARDS.

- a. Since payments by the Government to carriers for telephone facilities add up to many millions of dollars from small charges, it is important that the standards and guidelines be applied throughout the agency and that all appropriate steps be taken to control these costs.
- b. Substantial economies can be achieved by diligent application of management principles applicable to office costs generally.
- c. Because telephone tariffs vary from company to company, it is not possible to prescribe in full detail the least-cost method of meeting specific requirements in each region. Whenever any special type of installation is planned, review should be made of aggregate charges for items making up the total cost of the installation.
- d. Deviations from standards and guidelines must be documented by surveys of the special requirements for the particular location in which a deviation is requested and should be accompanied by alternative solutions.
- e. A quarterly report of all deviations and supporting justifications will be furnished the Office of Communications, TCM, for evaluation.

Deviations will be authorized by the Chief of the Regional Administrative Services Division, only after careful analysis of special requirements and after required signatures are obtained from officials in the service or staff office requesting the deviation. As indicated in the following paragraphs, certain requisitions for service must be signed by the Head of the Service or Staff Office, as well as by the Administrative Officer. All deviations from standards or guidelines must be documented by full statements of the special conditions deemed to warrant the deviation.

PART 2. STANDARDS AND GUIDELINES FOR DETERMINING TELEPHONE REQUIREMENTS

1. TELEPHONE INSTRUMENTS.

a. Telephones should be provided only for those employees whose duties require them to place and receive official telephone calls.

b. To the extent feasible, one telephone instrument should serve the needs of two or more persons. A single instrument should be provided for those employees at adjacent desks whose call volume is sufficiently low that sharing would not adversely affect operations. In large, open office space where routine operations are performed and only occasional office calls are made or received, each instrument should be shared by as many employees as feasible.

c. One instrument in an office occupied by only one employee shall be standard practice.

2. KEY STATIONS. Key stations should be provided only where traffic volumes and work methods require an instrument to have access to more than one line, and at secretarial locations to permit answering of calls for more than one person. When secretarial service is not provided for a group of persons engaged in similar work, individual call volumes often can be channelled into a number of lines which is less than the number of individual stations. Where the normal six-button telephone will not provide a sufficient number of lines, 6051-type equipment, which provides for 12-button capacity, may be required to provide adequate coverage. The need for this equipment often can be eliminated by alternating the lines appearing on each station or by providing external buttons for in-office signalling.

3. CALL DIRECTORS. Call Directors will be provided only when 12-button 6051 key equipment would be inadequate to meet operating requirements. Since the Call Director is primarily for secretarial use, it will not ordinarily be installed on the desk of an office head.

4. AUTOMATIC DIALING EQUIPMENT. Automatic dialing equipment should be provided for use only when the average number of calls placed each day exceeds 50, and when numbers are called on a repetitive basis. Generally, automatic dialing equipment should be provided only in active canvassing activities and only when the need justifies the additional cost.

5. TOUCH-TONE INSTRUMENTS. Installation of touch-tone instruments is prohibited.

6. SPEAKERPHONES. Speakerphones should be provided only in those offices where there is frequent need for group participation in telephone conversations. Locations having a need for this facility may require acoustical treatment to obtain satisfactory results. The use of speakerphones in noisy locations should be avoided.

7. MISCELLANEOUS INSTRUMENTS. In general, other types of instruments should be provided only when no additional charge, recurring or non-recurring, is incurred, and only when such installation would meet a special justifiable need.

8. MAIN AND EXTENSION LINES.

a. The number of lines available for pickup on a given instrument should be sufficient for, but not in excess of, the number essential for conduct of assigned functions. Call volume, rather than individual preference or grade level, should determine the number of lines provided. An employee should not be provided with more than one line for the performance of his individual duties without traffic justification.

b. The total number of lines available to employees within an organizational unit should meet only the normal functional needs of the office, and should be provided on the basis of actual requirement rather than preference or grade level. In general, one primary line is adequate for 20 calls made or received by an office each day. Extension stations should be provided for only those employees requiring service.

- c. Telephone instruments will be connected to the nearest PBX on which lines are available.

9. SPECIAL LINES.

- a. Individual Business Lines. These lines should be provided only when the user makes and receives numerous official calls which are administratively confidential in nature, and when the cost involved is secondary to privacy. Installations of this type of service will not be approved on Centrex or direct in-dialing PBX installations.
- b. Intercommunicating Lines. Intercommunicating lines, with calls accomplished by dialing (as with the 20-40 Dial Pak, 6A dial intercom, or other point-to-point intercommunicating system), should not be used in lieu of less expensive PBX dial intercommunicating capability. Neither should these systems be used to replace normal signaling buttons and buzzers and intercom lines, unless economical or special advantages can justify their use.

10. SPECIAL FEATURES AND EQUIPMENT.

- a. Auto-call devices, such as the Bell-Boy, should be provided only for use in connection with emergency activities and in unusual operating situations.
- b. Illuminated key buttons should be provided only where more than two lines appear in more than two instruments, and where the location or quantity of instruments preclude visual or audible observation of distinctive line signals on incoming calls. Since illumination of lines is expensive, this feature should be held to the minimum consistent with provision of adequate service.
- c. Automatic answering devices may be installed only when there is a valid need to leave a message on unattended telephones, such as in Emergency Control Centers, the offices of PBS Area or Buildings Managers, and TCS Record Communications Centers.
- d. Installation of listening-in circuits and of mechanical and electrical devices for recording telephone conversations is prohibited.

e. Transmitter cutoff switches are authorized only for use in eliminating background noise or where there is frequent need for a stenographic record of a conversation.

f. Color telephones are permissible only in the event that no additional costs are involved. Color telephones in use will be removed only when there is a recurring charge for their use.

UNITED STATES GOVERNMENT

Memorandum

*Budget & Gen'l
Reduction*

TO : Heads of Divisions & Offices, HQ
Managers of Field Offices

DATE: December 10, 1965

FROM : *R. R. Herington*
General Manager

SUBJECT: COST REDUCTION PROGRAM—FIRST SEMIANNUAL PROGRESS REPORT

Last July, pursuant to draft AEC Manual 0806, you forwarded your first Annual Report of Cost Reduction Goals. The total of such reports formed the basis for AEC's report to the Bureau of the Budget. By February 12, 1966, you are to forward your first semiannual report of progress toward your goals. The report should cover the six month period ending December 31, 1965, and should be prepared in accordance with AEC Manual 0806.

Based on present indications emanating from budget reviews, it will be more necessary than ever that AEC carry out its programs as efficiently and at as low a cost as possible in order to provide funds to support approved programs at satisfactory levels. Consequently, you are urged to re-examine your cost reduction goals and identify such additional dollar savings as can be made without impairing objectives of the affected programs.

Please remember also our request to highlight a few outstanding, interesting or unique examples of individual cost reduction actions from each report.

Incidentally, of the 85 cost reduction examples which AEC forwarded in response to Mr. Busby's request, five have been tentatively selected for publication on the basis of apparent usefulness to three or more agencies. The number of AEC examples selected compares quite favorably with the number selected from other agencies. Your cooperation in providing cost reduction examples for these purposes is greatly appreciated.



Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

12-10-65



EDWARD J. GREEN ASSOCIATES • GATEWAY TOWERS • PITTSBURGH, PA. 15222 • 412-261-4973

BAF-8-Cost Reduction

December 8, 1965

The Honorable Glenn T. Seaborg
Chairman
Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Seaborg:

On August 25, 1965, in a memorandum to the heads of all Federal Government departments and agencies, President Johnson announced the introduction of a new planning-programming-budgeting system in Government. Emphasizing the urgency and importance of this undertaking, he said: "You should begin at once to develop plans for the creation of your program and planning staffs. I want you to get the best people possible for these staffs both from within your organizations and from outside of Government."

The President thus recognized two of the most critical problems faced by any organization's management today -- whether in the public or private sector. One is the need for better operational planning in order to cope with today's accelerated rate of change and increased complexity -- a need which is both more urgent and more necessary than ever before. The other critical need is for people trained in the techniques of planning -- since the effectiveness of any planning system depends strongly on the knowledge and capability of those responsible for its development and execution.

This on-rush of demand for qualified people to do planning work has resulted in the Executive Staff Seminar for Planning Directors described in the attached brochure. It is a two-week program of intensive training designed to provide the background and workshop experience needed to equip a well-qualified participant to develop and direct a dynamic planning process in any type of organization. One of the basic texts we use, incidentally, is the condensation of the RAND Corporation study entitled Program Budgeting.

Since you are one of those directly involved in carrying out the President's proposal, we thought you would be interested in knowing about this special seminar for training staff planners. We have in mind, particularly, the information contained in Bulletin No. 66-3, issued by the Bureau of the Budget on October 12, 1965. Section 10 of this bulletin said in part:

"Personal responsibility for the Planning, Programming and Budgeting system rests with the head of each agency. Since planning, programming, and budgeting are all essential elements of management, line managers at appropriate levels in the agency must also take responsibility for, and participate in, the system. Responsibility should be so fixed that the

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12-8-65

agency head-receives the recommendations of his principal managers (e.g., bureau chiefs) on program plans as well as on the findings and recommendations of centrally prepared analytical studies."


"Specialized staff assistance is also essential in all but the smallest agencies. Such assistance will be especially useful in the preparation and review of Program and Financial Plans and in the preparation of the appropriate analytical studies. Each agency will, therefore, establish an adequate central staff or staffs for analysis, planning and programming. Some bureaus and other subordinate organizations should also have their own analytical planning and programming staffs."

In our experience, planning can be improved most rapidly and effectively by giving intensive training in planning concepts and procedures to a nucleus of staff planners who can then be placed strategically throughout the organization. The Executive Staff Seminar is designed specifically to meet that objective.

For these reasons, I thought you would be interested in taking advantage of this opportunity to develop qualified planners for your staff. An application form is included for your convenience. Accommodations at the Pittsburgh Hilton are available at a special government rate which is within the standard per diem allowance.

Please let me know if you have any questions or would like to have additional information.

Yours truly,



Edward J. Green

UNITED STATES GOVERNMENT

Memorandum

RAF-8
Cost Redu
Copy - Germantown

TO : Heads of Divisions & Offices, HQ (1 cy)
Managers of Field Offices (1 cy)

DATE: December 1, 1965

FROM : *W. Slaton*
William F. Slaton, Director
Division of Plans and Reports, HQ

SUBJECT: NASA COST REDUCTION REPORT (NOV. 1, 1965)

A copy of the NASA report on "Savings Techniques for Possible Application to the Operations of Other Departments and Agencies" is attached for your information and use. Analysis of such documents by AEC staff should generate ideas for new cost reduction actions to be taken in AEC and contractor operations.

Copies of the AEC report for the same period were transmitted to you on October 28, 1965.

Attachment:
As stated

cc: Field Cost Reduction Coordinators (1 cy)

cy filed O-M-12



Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

12-1-65

SEP 29 1965

The President
The White House

Dear Mr. President:

This report is submitted in response to Mr. Horace Busby's memorandum of July 16, 1965 requesting that on September 1, October 1, and November 1, 1965, NASA report on cost reduction economies which might be applicable to other Government Agencies. It includes techniques and economies reported by NASA's Installations since the October 1, 1965 report.

Respectfully yours,

Original signed by
Hugh L. Dryden

Hugh L. Dryden
Deputy Administrator

Enclosure

CS/BCPreacher:eps 10/29/65

AAD

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Washington, D. C.

SAVINGS TECHNIQUES FOR POSSIBLE APPLICATION TO THE OPERATIONS OF OTHER DEPARTMENTS AND AGENCIES

1. Resources - Conservation and Utilization

The amount of chlorine going into the water supply at the John F. Kennedy Space Center - NASA was controlled by the water flow rate. This was inaccurate and wasteful. Now, a Recorder-Controller has been installed and the chlorine dosage rate has decreased by being accurately measured.

2. Reassessment of Requirements

By changing the type of service contract on dictating equipment from an annual basis to a "per call" basis, \$8,788 will be saved at the Manned Spacecraft Center annually.

3. Consolidated Airlines Traffic Office

A consolidated airlines traffic office was established at the Manned Spacecraft Center and subsequently at the John F. Kennedy Space Center - NASA. This type of office is jointly established by the major airlines serving a specific locality for the purpose of providing centralized reservation and ticketing service, with all expenses borne by the participating airlines. As a result of the opening of the Airlines Traffic Office at the Manned Spacecraft Center, savings in excess of \$100,000 are anticipated and a requirement for two Civil Service positions has been eliminated.

4. Reducing Paperwork

- a. A contractor who previously prepared a separate Material Inspection and Receiving Report (Form DD 250) for each line item delivered to the Government, was required by NASA's Western Operations Office to consolidate all line items which were shipped to the same destination within a two-or three-day period on a single DD 250. This action resulted in a savings of \$85,044 in contractor overhead dollars.
- b. Formerly, the John F. Kennedy Space Center - NASA Security Patrol reported every operational matter on an "Official

Report". This procedure required typing, reproduction of copies, filing, etc. Now a "Communications Sergeants' Blotter" has been developed. This form is completed on the spot and eliminates the "Official Report". This action will result in savings of approximately \$10,840 annually.

- c. The Data Center at the George C. Marshall Space Flight Center published catalogs of information available for use in making presentations. These catalogs were published at four-month intervals for the purpose of eliminating "one-time" preparation of art work.

A reevaluation of use of these publications and frequency of publication was performed. As a result of this reevaluation, frequency of publication was reduced from four-month to six-month intervals. This action resulted in annual savings of \$9,511.

5. Improved Fabrication Techniques

The buildup of new control panels, electronic chassis, and alterations to current installations requires many cutouts that are not circular. These cutouts in the 1/8" aluminum panels had formerly been made with a power hack saw or do-all type band saw. This technique required that pilot holes be drilled for insertion of the power hack saw blade. If a band saw was used, the blade had to be inserted and welded, which process had to be reversed when the sawing was completed. The rough edges resulting from the saw cut then were dressed with a file to obtain an acceptably smooth hole. The total procedure, depending upon the skill of the operator and the condition of the equipment, required from 12 to 35 minutes per hole.

At the Lewis Research Center, slotting punches and dies have been purchased to fit into a Weidman hole press. All that is required to cut rectangular holes is to set the guide on the machine and punch a hole. To complete a standard 6" hole requires from 6 to 10 minutes. As no cutting oil is required, cleanup time is greatly reduced. As an example, in one control panel there were over 265 holes made using this rectangular or slotting punch method, cutting various sizes from one inch to some that were 16" x 16". Annual savings of approximately 2,000 man-hours per year at \$3.50 per hour are estimated.

6. Reduction in the Cost of Photography, Printing, and Reproduction

A number of new methods in photography, printing, and reproduction were introduced at the John F. Kennedy Space Center - NASA through a reassessment of processes, equipment, and materials in use. Savings exceeding \$800,000 annually were achieved through the following changes:

- a. Change from use of 8 x 10 photographic prints used in construction program reports to offset printing from one photographic 8 x 10 print.
- b. Change from production of hard copies from microfilm by use of a reader-printer to first hard copy on an 18 x 24" electrostatic process copier and remaining copies by use of the diazo process.
- c. Change from production of offset masters by process camera (negative and offset plate) to direct image for offset printing through use of photographic direct-image offset masters.
- d. Discontinued use of process camera to obtain plates for short runs of written and typed material and drawings and substitution of direct image plates produced by photographic direct image offset masters.
- e. Several optical masters and work prints were furnished to the requestor for the purpose of printing motion pictures. Under the new technique, one optical master is furnished for viewing to determine the portions of the reel required. Requesting agencies then make required work prints at their own plants.
- f. Second originals of facilities drawings were obtained from the Corps of Engineers on diazo Mylar material. The second original is now obtained on diazo Sepia.
- g. Opaque diazo blue-black line prints had been reproduced on 24-pound paper and transparent diazo Sepia second and originals had been reproduced on plastic-coated 100% base paper. Under the new method the blue-black line prints are being reproduced on 20½ pound paper and the second original on transparentized 100% base rag paper.
- h. Diazo blue-line material had been used for reproduction from transparency originals. Diazo black line is now used to process transparencies.

1. Conversion from Kodalith Ortho Type 3 film with one-side sensitized plate to Dino Copy film with two-side sensitized plate has doubled the plate capacity without deterioration in quality.

7. Improved Manpower Utilization

The Chemistry Laboratory at the Lewis Research Center used approximately 20 bottles of nitrogen gas weekly. Delivery of the gas required the expenditure of 10 man-hours in unhooking the empty bottles from the bottle manifold, moving the bottles upstairs to the loading dock, and then moving the bottles downstairs to the Laboratory and rehooking them to the manifold. This effort was avoided by the adaptation of an old style trailer which was not suitable for general use. The trailer was parked behind the building and a line installed directly to the manifold. Now the trailer is filled with nitrogen gas which feeds directly to the manifold without removal of the bottles. Savings are estimated to be \$1,772 annually.

8. More Efficient Cryogenic Testing

The former method of conducting tensile tests in cryogenic liquids at the George C. Marshall Space Flight Center was laborious and uneconomical. Because of test equipment limitations only one specimen at a time could be tested in a liquid hydrogen filled cryostat and two engineers were required to be in constant attendance. Following each test the liquid hydrogen had to be drained from the cryostat and there was considerable evaporation loss. This test procedure permitted the accomplishment of 4,160 tests annually on a two-shift basis. Since a requirement of 4700 tests annually was projected, third shift or weekend work was required.

Revised procedures now provide for "load train" testing by a Cryogenic Multiple Specimen Test System. This permits the testing of six or more tensile specimens simultaneously; requires only one engineer in constant attendance, and eliminates the requirement for drainage after each specimen test, thus also reducing evaporation loss. From 16 to 30 specimen tests per shift are now possible. The net annual savings from this improved testing technique amount to \$92,800.

Bud 54-8. Cost Reduction

UNITED STATES GOVERNMENT

Memorandum

Copy - Germantown

TO : Heads of Divisions & Offices, HQ
Managers of Field Offices

FROM : William H. *Slaton* Slaton, Director
Division of Plans and Reports, HQ

SUBJECT: COST REDUCTION SUMMARY, OAK RIDGE OPERATIONS

DATE: October 29, 1965

Attached is a resume of cost reduction experience in Oak Ridge which Mr. Sapirie has distributed within ORO as "a means of keeping the staff alert to cost reduction possibilities and accomplishments."

We are very much interested in papers of this type which supplement and tie together a series of reports, pointing out trends and areas for attention.

I thought you would be interested in seeing this excellent summary produced by Oak Ridge and, if you have not already done so, might want to take a similar look at the accomplishments of your own organization. I would appreciate receiving a copy of any such paper which you have or expect to have available in the near future.

Attachment:
As stated

Copy 3 memo filed

for 54-8. Cost Reduction



Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

100-4-65

II. COST REDUCTION PROGRAM IN OAK RIDGE OPERATIONS

A. Early Accomplishments

In November 1963, President Johnson inaugurated a Government-wide cost reduction program in order to carry out his pledge for economy in Government. We started our own program in 1960 as soon as it became apparent that our contractors could safely meet production schedules and specifications. At that time, we felt it necessary to challenge the operating contractors to achieve cost reductions with emphasis on reducing the size of their organizations. Since 1960, the total employment on production has been reduced more than 30%, saving about \$50 million per year. Part of this is due to a reduction in production scope, such as shutting down the top of the ORGDP and the feed plant at Paducah. By far the largest part, however, is due to management emphasis on cost efficiency including process improvements and automation. Our experience is summarized below:

Savings in Production Program FY 1960-1964

	<u>Costs (In thousands)</u>		<u>Employment</u>		
	<u>Cumulative Savings^a</u>	<u>Change FY 60-64</u>	<u>FY 1960</u>	<u>FY 1964</u>	<u>Change FY 60-64</u>
Feed Materials	\$ 35,244	\$ 14,432	3,457	2,437	1,020
U-235	151,501	53,792	7,879	4,784	3,095
Power	60,746	21,698			
CIP	43,995	14,144			
All Other Cascade	36,639	14,447			
All Other U-235	10,121	3,503			
Total Program 02	\$ 197,774	\$ 75,121	11,336	7,221	4,115

^a Cumulative savings: sum of each year's savings derived by comparison of FY 61 through FY 64 with FY 60.

B. ORO Cost Reduction Program

1. Current Experience. Now that cost reduction has become fashionable and more formal, we find ourselves with the difficult task of trying to make further reductions, beyond those already achieved. For the three six-month reporting periods just past, the ORO contractor record can be summarized as follows:

<u>Six-Month Ending</u>	<u>No. of Actions In Period</u>	<u>Dollars Saved In Period^{a/}</u>	<u>Future Dollars to be Saved^{a/} (000)</u>	<u>Total (000)</u>
6/30/64	509	\$ 7,481	\$ 11,310	\$18,791
12/31/64	451	2,644	7,801	10,445
6/30/65	682	2,269	4,333	6,602

^{a/} Savings from actions shown in "No. of Actions In Period," with 1½ year limit on claims of future savings.

The downward trend in the number of actions would probably have continued into June 1965 except for the efforts of Y-12 and MLO, whose actions respectively increased from 120 (12/31/64) to 380 (6/30/65), and from 119 to 126. These are the only two plants reporting a steadily increasing number of actions over the three reporting periods. By contrast, the number of actions for ORGDP has dropped from 106 to 68 to 47; ORNL from 91 to 49 to 49; Paducah, 26-19-11; and GAT, 51-21-21, for the corresponding periods. With some exceptions, the dollar amount of savings reported by individual contractors has declined during these periods, as shown by the fall-off from \$18,791,000 to \$10,445,000 to

\$6,602,000 in the preceding table. The decline partly reflects a tightening of the cost reduction reporting requirement and a better understanding of eligible actions by the contractors. Very likely it also represents the greater difficulty of discovering new areas where substantial reductions can be achieved. Only ORNL and MCW, of the principal contractors, reported increased dollar savings in 6/30/65 as compared to 12/31/64.

The contributions of the principal contractors are shown below, in terms of the number of actions and amount of savings of each participant to the total for Oak Ridge Operations.

Percent Actions and Dollars Saved of Reporting Contractors
To Total ORO Actions and Savings, By Reporting Period

	<u>6/30/64</u>		<u>12/31/64</u>		<u>6/30/65</u>	
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
	<u>Actions</u>	<u>Savings^{a/}</u>	<u>Actions</u>	<u>Savings^{a/}</u>	<u>Actions</u>	<u>Savings^{a/}</u>
ORCDP	20.8	10.4	15.1	10.8	6.9	8.4
Y-12	15.7	15.3	26.6	45.6	55.7	41.8
Paducah	5.1	6.2	4.2	5.5	1.6	3.1
ORNL	17.9	23.0	10.9	8.2	7.2	13.0
GAT	10.0	19.1	4.7	4.3	3.1	5.0
NLO	16.9	13.2	26.4	11.2	18.5	12.1
MCW	2.2	2.7	2.4	4.2	1.3	7.6
Others ^{b/}	11.4	10.1	9.7	10.2	5.7	9.0

a/ Savings percentages relate only to savings for actions taken in period shown, and are based on savings in the six-months indicated plus the 18-month carry-forward benefits.

b/ Includes GE, EKF, UT, ORINS, MSI, TVA(EGCR), Power Suppliers and Reactive Metals.

The above data can reflect a variety of circumstances, the more important are the relative number of cost reduction opportunities in each plant, and management-employee attitudes toward the cost reduction program. Obviously, reporting capability enters the picture, but perhaps not so much as to cause a major shift in rankings.

No saving is too small to overlook. As an illustration, although the Y-12 plant reports the greatest dollar totals of all plants, almost one-third of its recent 380 cost reduction actions individually amounted to \$5,000 or less; most of these were around \$1,000. An idea with a low saving in Oak Ridge may be highly valuable elsewhere. The White House has asked Chairman Seaborg for regular reports on new ideas and practices that may be beneficial to other agencies. Several Oak Ridge items were specifically cited in the September report.

2. AEC Total Cost Reduction and the CRO Share. On August 31, the Chairman reported to the President that AEC cost reductions in FY 1964 and 1965 amounted to about \$100,000,000 annually or 3.7 and 3.8 percent of total costs incurred in each year. That 3.8 percent for 1965 becomes more meaningful when you realize that our 1965 total costs were \$136,000,000 less than in 1964. He also reported that Congress was able to apply almost \$50,000,000 to reduce our 1966 budget, and the balance of the saving, slightly over \$50,000,000, will be used to reduce our 1967 appropriation request. The Chairman acknowledged these results as coming from the initiative and ingenuity of the AEC staff and the contractors. Then he assured the President we would do even better in FY 1966.

Oak Ridge's part in these AEC totals can be illustrated in several ways. Paralleling the comparison made by the Chairman, the Oak Ridge cost reductions in FY 1964 and 1965 can be related to ORO total costs incurred. The comparison is as follows:

	<u>FY 1964</u> (in millions of dollars)	<u>FY 1965</u>
Total ORO costs	\$ 471.9	\$ 433.9
ORO cost reductions	22.7	12.6
Percent cost reductions to total costs	4.8	2.9

NOTE: ORO costs and cost reductions are comparable to the AEC totals reported to the President.

We compare very well in FY 1964, partly on account of cost actions which later judgment would consider ineligible or whose dollar estimates were not conservatively measured. We seem to have done less well in FY 1965, as compared with the AEC total, which may suggest the need for a harder push in this program, especially if we are to implement the Chairman's assurances to the President.

Another comparison might be made. In FY 1964, we accounted for about 22 percent of the total AEC cost reductions (\$103.0 million AEC direct and contractor). We topped all the other Field Offices, with Albuquerque second and Nevada third. In FY 1965, ORO dropped to third place (12.6 percent) in a tight race with Albuquerque (14.1 percent) and Richland (13.1 percent).

C. Future of Cost Reduction

The cost reduction program has become an integral part of our management scheme. The test of its future will lie in our ability to make the program work effectively. The downward trend in actions and dollar savings may indicate a need to reexamine our approach to the program and its application to individual facilities.

1. Contractor Evaluation: Contractor cost reduction performance will increasingly become a part of our measurement of a contractor's entire accomplishments. As you know, the contract administrator must presently evaluate his contractor's cost reduction program and each semi-annual report. The evaluation of cost reduction programs now is to become part of the annual appraisal of contractors, as a specific reporting item. Performance in this regard is expected to be given appropriate weight at the time of contract renewals and, in some degree, in the determination of fees.
2. Report of Goals: We recently completed our first Report of Cost Reduction Goals, a new feature required by the BOB, which places greater emphasis on the AEC management role, and consequently on each and everyone of us. Dollar goals for efforts we plan to undertake in FY 1966 totaled slightly over \$2 million, and additional significant items are under study. Next January we must report our actual progress in realizing these goals. The Bureau has frankly stated that the President expects to finance part of his increased program expenditures from cost reductions. The President wants each

agency to have a successful cost reduction program, but if a decentralized program doesn't work, then reductions are likely to be made on a centralized basis. Consequently, Chairman Seaborg and the General Manager are very much interested in the ABC record of reporting goals and accomplishing cost savings. This has an important bearing on the BOB's attitude toward our budget requests.

Budget & Reports Division
FCP:sh Sept. 16, 1965

~~SECRET~~
Budget 8-10
Cost R. Section
OCT 29 1965

Dear Mr. O'Brien:

I am pleased to respond to your letter of September 24, 1965, asking for clarification of my comment before the Joint Committee on Atomic Energy, March 18, 1965, regarding power cost savings to the public brought about by the advent of nuclear power.

In general, these savings develop in two aspects. The first would be through the production of power from nuclear plants at costs somewhat less than would have been achieved by alternative power sources. The present significance of this type of saving is small since the current volume of nuclear power production is only a minor portion of the national total. However, we expect that the savings will increase rapidly with time as nuclear power is increasingly adopted. The Atomic Energy Commission's 1962 Report on Civilian Power to the President includes our estimate that by the end of the century there will have accrued cumulative savings of about \$30 billion, or an average of close to a billion dollars a year. From a modest beginning these savings are projected to grow progressively with expanding production of power from nuclear sources.

The second category of savings results from the competitive impact of the economic potential of nuclear power on the conventional power industry. It is this category which has already affected arrangements concerning the supply and shipment of fossil fuels and the supply of equipment. Mr. Roddis in his December 1964 speech, gave recognition to the reduction in fossil fuel costs as contributing to overall savings. Mr. Sporn pointed out in his statement before the Joint Committee on Atomic Energy for the 1962 Hearings on the Development, Growth and State of the Atomic Energy Industry that efforts to date to develop competitive nuclear power had already enormously stimulated the development of both the technology and economics of conventional fuels.

Just how substantial these savings have been in the case of coal alone was outlined in a recent speech by Charles R. Ross, a member of the Federal Power Commission. According to Mr. Ross: "The most significant development in the fuel market since 1963 has been the

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OFFICE					
SURNAME					
DATE					

success of coal in improving its production operation and, in cooperation with the railroads, in reducing substantially coal freight rates. As a result, the coal industry has been able to enter into long term contracts with utilities at prices not substantially higher or even lower than those existing in the past decade."

While perhaps these savings are not entirely attributable to competition from nuclear power, we are confident that this economy drive is due in no small measure to the fact that nuclear power in certain areas is becoming a competitive force to be reckoned with. In this connection, we draw some significance from the fact that the important developments described by Mr. Ross have occurred "since 1963", a date which happens to coincide with the year in which a commercial sized nuclear plant (Oyster Creek) was first collected on an economical basis according to its builders.

Inasmuch as there are a number of considerations, additional to competition from nuclear power, which influence conventional power costs, different individuals would express a wide range of opinions on the subject. Because of this, my answer to Congressman Hosmer at the March 18 Authorization Hearings was intended to be in the general context that substantial savings to electricity consumers from the atomic power program are being realized and will be realized. It probably would have been desirable if there had been an extensive discussion without reference to a specific figure.

I am sending copies of this letter to Congressman Holifield and Hosmer.

Chairman (2)
GM (2)
AGMR (1)
Cong. Lia. (2)
IP
OC
QA

Sincerely yours,

John F. Seaberg

Chairman

Mr. Brice O'Brien, General Counsel
National Coal Association
Coal Building
1130 Seventeenth Street, N.W.
Washington, D.C. 20036

IP

QA

OC

RDT:D

cc: Honorable Chet Holifield, Chairman

OFFICE	Joint Committee on Atomic Energy					
SURNAME	Honorable Craig Hosmer House of Representatives					
OFFICE	RDT:PM	RDT:D	CONG. LIA	AGMR	AGM/DCM	GM
SURNAME	McKay/ac					
DATE	10/20/65					

UNITED STATES GOVERNMENT

Memorandum

TO : Heads of Divisions & Offices, HQ

DATE: October 28, 1965

FROM : *W. Hollinger*
General Manager

SUBJECT: COST REDUCTION GOALS

President Johnson has acknowledged receiving recent reports on cost reduction actions and goals. In a statement to the Cabinet, the President announced totals, listed some instructions to be followed in reviewing 1967 budget requests and outlined areas for more concentrated attention. A copy of his statement was sent to you as a part of AEC 878/12 on September 14, 1965.

Although we can take pride in the results obtained in our cost reduction program, the President clearly intends to increase rather than decrease emphasis on the program.

Based on the status of information at the end of August, 1965, we established preliminary AEC cost reduction goals for FY 1966 and FY 1967. Most of the goals proposed by field offices under the heading "increases in productivity and efficiency" were incorporated into the AEC goals. A tabulation of the official goals in this category for each field office is attached (Attachment #1). Goals reported by field offices for elimination of low priority activities, etc., have been incorporated into results of the general program reviews which are described below and in Attachment #2. Specific reasons for including or not including proposed goals have been discussed with field office Cost Reduction Coordinators by a representative of the Division of Plans and Reports.

The review and elimination or reduction of marginal or lower priority programs and the reduction of expenditure levels have become a large factor in the goals for FY 1966 and 1967. A current summary of AEC Budget Reductions and Savings, representing official program goals, is included as Attachment #2. The detail underlying program goals has been discussed with affected divisions by the Controller's office.

In accordance with AECM 0806 (draft), progress made during the first half of this fiscal year toward meeting cost reduction goals must be reported to the Division of Plans and Reports by February 12, 1966. Under the procedure the same progress report can also be used as the vehicle for proposing new goals or amending existing goals. However, if between now and December 31 you find that you are unlikely to meet your goal or will exceed your goal by a substantial amount, you should immediately notify the Cost Reduction Coordinator, Division of Plans and Reports.



Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

10-28-65

October 28, 1965

Although the attached goals have been submitted to the Bureau of the Budget, it is my feeling that we should have done better in setting goals for "increases in productivity and efficiency." Even though this is our first experience with the setting of such goals, they do not compare favorably with the size of our appropriation. You are requested to re-examine your operations for additional opportunities for savings and to take appropriate action.

I want to emphasize earlier instructions that your report should cover all cost reduction actions which have been taken, whether or not they had been specifically contemplated in the establishment of goals. You should include items which fall under the category for elimination of low priority items, etc., even though the AEC goals in this area have been established on an agency-wide basis without identification of separate goals.

Attachments:

1. Goals Reported by Field Offices
2. Summary of AEC Budget Reductions
and Savings

GOALS REPORTED BY FIELD OFFICES

(in thousands)

	<u>Total of Goals Reported to Headquarters</u>		<u>Amount Incorporated into "Increases in Productivity and Efficiency"</u>	
	<u>FY 1966</u>	<u>FY 1967</u>	<u>FY 1966</u>	<u>FY 1967</u>
Albuquerque	\$ 3635.6	\$ 663.5	\$ 1879.0	\$ 530.0
Brookhaven	9.0	109.0	8.0	8.0
Chicago	1168.0	30.0	954.0	30.0
Grand Junction	0.0	38.0	0.0	38.0
Idaho	2386.0	661.0	244.0	358.0
Nevada	41.0	4551.0	0.0	3501.0
New York	1011.0	541.0	1011.0	541.0
Oak Ridge	2560.0	2358.0	2051.0	1760.0
Pittsburgh Naval Reactors	480.0	410.0	450.0	410.0
Richland	3072.0	6516.0	2368.0	5460.0
San Francisco	432.0	401.0	432.0	401.0
Savannah River	325.0	80.0	325.0	80.0
Schenectady Naval Reactors	48.0	0.0	48.0	0.0
SNPO	1715.0	480.0	1715.0	400.0
	<u>\$16,882.6</u>	<u>\$16,838.5</u>	<u>\$11,485.0</u>	<u>\$13,517.0</u>

SUMMARY OF AEC BUDGET REDUCTIONS AND SAVINGS

FY 1966 and FY 1967

(in thousands)

	<u>FY 1966 Reductions and Savings</u>	<u>FY 1967 Reductions and Savings</u>
Raw Materials.....	\$ 50,968	\$ 97,953 *
Special Nuclear Materials.....	31,073	37,465 *
Weapons.....	47,749	31,707
Reactor Development.....	103,494	41,136
Physical Research.....	2,110	2,400
Biology & Medicine.....	2,075	2,305
Training, Education and Information.....	1,624	62
Isotopes.....	780	1,185
Community.....	40	200
Security Investigations.....	-	200
Increase or Decrease in Selected Resources...	45,170	25,500
	<hr/>	<hr/>
Subtotals	\$285,083	\$240,113
Application of Prior Year Savings to Reduce Appropriation Requests.....	131,784	51,570
	<hr/>	<hr/>
Total Savings and Reductions	\$416,867	\$291,683

* Reductions in raw materials procurement and U-235 production costs are from FY 1965 levels; all other reductions are from immediately preceding fiscal year.

Budget 8. Cost Reduction

Copy - Germantown

UNITED STATES GOVERNMENT

Memorandum

TO : Heads of Divisions & Offices, HQ

DATE: October 28, 1965

FROM : *W. J. Hollingsworth*
General Manager

SUBJECT: COST REDUCTION GOALS

President Johnson has acknowledged receiving recent reports on cost reduction actions and goals. In a statement to the Cabinet, the President announced totals, listed some instructions to be followed in reviewing 1967 budget requests and outlined areas for more concentrated attention. A copy of his statement was sent to you as a part of AEC 878/12 on September 14, 1965.

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Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

10-28-65

October 28, 1965

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FY 1966 and FY 1967
(in thousands)

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* Reductions in raw materials procurement and U-235 production costs are from FY 1965 levels; all other reductions are from immediately preceding fiscal year.

UNITED STATES GOVERNMENT

Memorandum

TO : Heads of Divisions & Offices, HQ
Managers of Field Offices

FROM : William H. Slaton, Director
Division of Plans and Reports, HQ

SUBJECT: INNOVATIONS, NEW METHODS AND NEW PROCEDURES WHICH MIGHT
BE APPLICABLE TO OTHER AGENCIES

DATE: October 28, 1965

Attached for your information are copies of the November 1, 1965, report listing cost reduction ideas which might be used by other government agencies. This is the last in a series of three special reports requested by the President. I believe that the 84 examples which we contributed are a credit to the AEC and should be of benefit elsewhere in the government. Your responses to the General Manager's memorandum of July 28, 1965, and the efforts of your Cost Reduction Coordinators were very helpful in preparing the reports.

Some of the items have not been circulated previously; staff members should be able to find additional opportunities to apply some of these ideas within AEC operations.

Attachment:
As stated

cc: Harry S. Traynor, Asst. to General Manager
D. A. Ink, Asst. General Manager
Dr. S. G. English, Asst. General Manager for Research
and Development
John A. Erlewine, Asst. General Manager for Operations
George F. Quinn, Asst. General Manager for Plans
and Production
Howard C. Brown, Asst. General Manager for Administration
Dr. J. A. Swartout, Asst. General Manager for Reactors
John A. Hall, Asst. General Manager for International
Activities
John P. Abbadesse, Controller
Brig. Gen. Delmar L. Crowson, Director, Div. of Military
Application
Harold L. Price, Director of Regulation



Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

10-28-65



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

October 26, 1965

Dear Mr. Califano:

The third in a series of three special reports on cost reduction actions is attached in response to the President's request. These examples have been selected, with the aid of our field office managers, as having potential usefulness in other government operations.

Not all of these actions are completely new or unique. It is our observation that, while many new ideas are being generated, the President's increased emphasis on cost reduction is also very beneficial in uncovering rather routine areas for saving which may have been overlooked or taken for granted in large organizations.

I hope that the information we have assembled in these special reports will assist in the pooling and sharing effort and will contribute to further success in cost reduction throughout the Executive Branch. We will be glad to furnish any additional information on these cost reduction actions taken within the AEC which would be helpful.

Sincerely yours,

Chairman

Honorable Joseph Califano
The Special Assistant to the President
The White House
Washington, D. C.

Attachment:
As stated

U. S. ATOMIC ENERGY COMMISSION

Report of Innovations, New Methods and New Procedures which
Might Be Applicable to Other Agencies

Report date - November 1, 1965

CONDUCTING APPROVED PROGRAMS ON A MORE AUSTERE BASIS:

1. High volume fluid filtration is achieved at a uranium processing plant by the use of sintered metal filter tubes. These tubes had been replaced when clogged. By developing a means for cleaning the tubes with nitric acid and reusing them, \$10,000 is saved per year.
2. Fan blade failures on cooling towers are expensive, involving off-stream time, repairs on an emergency basis, and damage to the tower. Periodic removal of fans from the towers, dismantling the blades, acid cleaning to permit inspection of the hubs, and regalvanizing after inspections, costs about \$500 per fan. A gaseous diffusion plant developed a new method for in-place inspection of the cooling fans. The hubs are heated in place and a penetrating dye is applied to locate hub cracks. In-place inspections of 43 hubs identified one cracked hub that was replaced. Aside from the avoided damage, \$22,000 was saved.
3. A major AEC contractor has consolidated certain procurement for all its divisions into a single contract with one supplier. The supplier makes a semiannual rebate based on total corporate purchases. The division which operates exclusively under an AEC contract received \$4000 as its share of the rebate for the first half of FY '65.
4. Superfluous radioactive materials are usually buried without any provision for recovery. Waste containing crude americium that normally would be buried was instead stored against a potential need. Shortly afterward, the need developed and the stored material was used making unnecessary the special processing of current production and saving \$80,000.
5. Newly hired personnel had been making their own arrangements for inbound household goods shipment to a cost type AEC operating contractor for later reimbursement. Now inbound moves are accomplished under government bill of lading at a lower rate.
6. The original plant specification on laboratory hoods called for absolute filtration in a chemical processing plant. These filters required annual testing to determine that they were meeting the specifications. After a technical review, it was determined that the plant specifications could be changed to a 95% efficient filter without incurring undue risk.

CONDUCTING APPROVED PROGRAMS ON A MORE AUSTERE BASIS (continued)

7. By use of more economical typing procedures, a quarterly progress report has been reduced in size from an average of 475 pages to an average of 275 pages. Change from one-column standard typing to two-column unjustified typing and reduction of illustration size to permit stripping-in of illustrations resulted in reduction of 200 pages per issue. Savings of reproduction costs of \$400 and \$100 postage per issue resulted in an annual savings of \$2000.
8. All offset paper stock had previously been purchased precut and prepackaged by a contractor who is now purchasing this paper by the skid and cutting it on an existing machine in-house when needed. Savings of \$7,200 per year are net after deducting an allowance of \$500 for cutting labor.
9. A contractor has established a file of reproducible material (graphs, charts, photos, etc.) required in various technical reports so that this material can be readily utilized each time it is needed. Savings of \$6000 per year has been realized by this AEC contractor.
10. One of AEC's contractors found that procedures for stopping pump motors and reducing cooling water to gravity flow could be accomplished satisfactorily during the process of shutting down reactors and have reduced the consumption of electrical power correspondingly.

SPECIFYING OR UTILIZING LESS EXPENSIVE MATERIALS AND COMPONENTS WHICH CAN DO THE JOB CONSISTENT WITH MAINTAINING ESSENTIAL HIGH QUALITY AND PERFORMANCE STANDARDS:

1. A review of existing methods shows how graphite machining costs could be reduced \$6000 a year when automatic methods were replaced by manual. In one plant, graphite billets had been clamped into a fixture and a power feed table provided billet travel during machining. The re-evaluation of operations conducted under the cost reduction program indicated that the parts could be made less expensively by utilizing manual hold down and hand feed. A final study showed that manual operations cut the overall time required by 55%.
2. Certain reactor components were subject to distortion and metallurgical damage from the intense heat applied during welding. Stainless steel pads had been used to absorb this heat but damage still occurred. It was found that copper pads provided better heat absorption thereby minimizing heat caused defects.
3. A national laboratory reviewed and simplified their chemistry building radioactive exhaust system. Eighty expensive filters were deleted, and perforated baffles replaced the hood prefilters yielding a total saving of \$14,600, while maintaining the required overall high efficiency.

SPECIFYING OR UTILIZING LESS EXPENSIVE MATERIALS AND COMPONENTS WHICH CAN DO THE JOB CONSISTENT WITH MAINTAINING ESSENTIAL HIGH QUALITY AND PERFORMANCE STANDARDS (continued)

4. A subcontractor supplied trash containers, and charged for trash removal on the basis of container quantity and size without regard for actual weight or volume of trash. As the containers were never filled before hauling, corrected procedures including the use of small containers saved \$14,000 per year at one facility.
5. A steam plant water tank developed a leak in the lower concrete section. Successful conventional repair would require expensive excavation and grouting. As the concrete provides a suitable mechanical support structure, the tank has been fitted with a low-cost vinyl liner that stops the leakage.
6. Corrosion and cracking of brass fittings on CO₂ fire extinguishers has been eliminated through the use of plastic tape. It was planned to replace these brass fittings with stainless steel fittings in locations where the extinguishers are exposed to a corrosive atmosphere. Then it was found that plastic tape wrapped around the brass prevented damage and obviated the need for stainless steel thereby saving \$2000.
7. An investigation of shipping cost revealed that better scheduling of shipments to the Nevada Test Site from Boston allows the use of Deferred Air Service. This class of service has a five day transit time and costs approximately 50% less than regular Air Freight which has one or two day transit time. By careful coordination, the time delay will not affect the operations.
8. In packaging fragile equipment for shipment, many AEC operations formerly used rubberized hair as the cushioning material. In most applications it has been found that expendable polystyrene dunnage could be used with an equal degree of safety and protection to the fragile equipment but at a cost which is 30% less per cubic foot.
9. At an AEC operations office, a manually prepared log book replaced a serialized parts identification system previously prepared by data processing equipment. The log book enables operators to determine which components have been modified or otherwise used in the different reactors. Since the volume of work originally anticipated did not develop, reliability and quality assurance procedures were changed to eliminate the automatic bimonthly updating. On re-evaluation, the log book was found more economical and efficient.

BUYING AT MINIMUM COST CONSISTENT WITH PROGRAM NEEDS:

1. The design agency conceived a better way to do a job, but the practicalities of production showed that the minor improvement was not worth the cost. The fabricator was requested to use a newly designed container for a neutron generator subassembly. Production cost analysis showed the new design would cost \$4000 a year more than the original design and that benefits were not that great. The design change was rescinded.

ACCELERATING INSTALLATION OF TECHNOLOGICAL AND PROCESS IMPROVEMENTS DESIGNED TO REDUCE OPERATING COSTS:

1. In the course of design review of a research building, unnecessary windows were eliminated from 30 modules. This saved a total of \$4,400 in construction, heating and air conditioning.
2. A support block as used in nuclear reactors is a complicated graphite shape which has thin fragile refractory coating. This coating must be free from even very small defects such as chips and flakes. Support blocks were previously wrapped in a rubber-like material and shipped in wooden boxes and were subject to 15 per cent loss due to breakage. Specially designed styrofoam containers now are used to hold support blocks and shipment is made in cardboard boxes. Breakage has been eliminated. Previously, breakage of approximately \$9,750 could be expected on a \$65,000 set of support blocks. Additional savings of \$175 in shipping container costs were realized. Total savings of \$9,925 per reactor are realized by this packaging improvement.
3. A cooling blower was added to an experimental furnace to extend the life of quartz lamps. Previous lamp life expectancy was one hour, and 42 new lamps (at \$12 each) were required for each test. By installing an \$80 blower, lamp life has been extended to at least 42 hours and probably appreciably more. Savings in excess of \$1000 per year were achieved.
4. An AEC laboratory had been using 7.9 million cubic feet of helium a year to purge fuel element evaluation furnaces. Large quantities of helium were lost through the graphite blocks forming the inner surfaces of the furnace. The graphite joints were sealed with a commercial grease compound containing molybdenum and glycol. The helium usage has been reduced to 3.3 million cubic feet saving \$160,000 per year.

ACCELERATING INSTALLATION OF TECHNOLOGICAL AND PROCESS IMPROVEMENTS
DESIGNED TO REDUCE OPERATING COSTS (continued)

5. The analysis of air for contamination by industrial wastes, internal combustion engine exhaust, or radioactive particulates requires that samples be taken, identified, and analyzed. Personnel at the Y-12 AEC Plant developed and patented a device that reduced air sampling costs by 70%. This new method uses an IBM card containing a filter paper insert in a new inexpensive plastic holder. After 24 hours of sampling, the card is removed, the residue analyzed, the analysis produced on IBM print-out. This method combined the air sample and record in a single unit; eliminates manual handling of data; provides standardization of collection, data processing, and storage.
6. A contractor at the Nevada Test Site designed a standardized system of terminating signal cables. A new type of termination cabinet was designed and submitted to manufacturers for quotation and fabrication. By this action, the conventional cabinets (cost \$34.59 each) were replaced by the more practical and economical cabinets at the unit cost of \$17.58.
7. By the erection of a 1-1/2 foot-high plastic barrier around a test reactor, contamination problems have been reduced by two-thirds and a savings of \$20,000 per year effected. Previously, during reactor shutdowns, air currents moving across the floor carried contaminated particles from the top of the reactor to the surrounding floor. Employees inadvertently tracked contamination throughout the building. The use of the plastic barrier around the reactor has cautioned employees and greatly reduced the spread of radioactivity. The method has proved so economical that it has been extended to other problem areas such as the experimental cubicles where specific experiments are isolated.
8. A method has been devised to transmit data output from the ADF system directly onto a teletype. Previously, it was necessary to employ a flexowriter and operator to transfer data from the computer onto a paper tape then to teletype. Now data is printed on paper tape directly from the computer for use on teletype. A savings of \$4000 per year is realized.
9. Through an employee's suggestion the cost of maintenance on a reactor was substantially reduced and potential damage was eliminated. The flow risers, located within the heat exchangers, were secured in place with six bolts tack welded to a flange. Each time the flow risers were removed for maintenance it was necessary to grind or burn off the tack weld, subjecting the flange to damage. Now the bolt heads are secured by tack welding to a flat bar thereby avoiding the need for welding to the flange.

IMPROVED MANAGEMENT METHODS:

1. Under a recently inaugurated magnetic tape library system, all of the magnetic tapes saved for future use on the CDC 3600 computer are continuously inventoried at a national laboratory. One of the effects of this system is to increase the utilization (turn-over) of the reusable magnetic tapes. This reduced the number of new tapes that must be added to the system, and the amount of storage spaced required, saving \$15,000 per year.
2. A group of mobile operators (with a \$77,000 annual payroll) was formerly needed in the maintenance contractor shops at a laboratory to maintain scientific equipment in serviceable condition. Installation of a monitoring system with a panel that shows the operating condition of 248 major pieces of plant and research equipment is now saving \$59,000 a year.
3. In moving a CDC 6600 computer into a room occupied by an IBM 7094 unit, it was desirable to use as many of the existing elevated 2' x 2' floor panels as possible although the panel penetrations, as arranged, did not match those required for the new computer. Computer techniques and punch cards were used to determine how to reassign these penetrated floor panels for maximum usage in the new installation. As a result of this technique, only one penetrated panel out of a total of sixty-four could not be reused. In addition, 136 unpenetrated panels were relocated in this room.
4. An AEC office had been getting telephone service through "Telpaking," the inclusion of normal circuits in a package arrangement at reduced cost. The telephone company initially refused to include alternate cables in the package arrangement for TELPAK. Then the AEC office requested the General Services Administration, as agent for the government, to appeal the case. At this point, the telephone company granted the request and adjusted rates, including a retroactive credit of over \$15,000.

Budget & Cost Reduction

OCT 26 1965

Dear Mr. Califano:

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Sincerely yours,

Signed *Glenn T. Seaborg*

Chairman

bcc: Chairman Seaborg (2)
Commissioner Palfrey
Commissioner Ramey
Commissioner Tape
General Manager (2)
Secretariat (2)
General Counsel
AGNA AGMPP
EAGM AGM

Honorable Joseph Califano
The Special Assistant to the President
The White House
Washington, D. C.

Attachment: PAR:DO PAR:D OC Asst.to GM
As stated Manly Slaton Traynor
10/ /65 10/ /65 10/ /65 10/ /65

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OFFICE	PAR:PC	AGMPP	EAGM	AGM	DEN	GM
SURNAME	Palmer:dmb	Quinn	Vinciguerra	Ink	Bloch	
DATE	10/25/65	10/ /65	10/ /65	10/ /65	10/ /65	10/ /65

10-24-5

U. S. ATOMIC ENERGY COMMISSION

Report of Innovations, New Methods and New Procedures which
Might Be Applicable to Other Agencies

Report date - November 1, 1965

CONDUCTING APPROVED PROGRAMS ON A MORE AUSTERE BASIS:

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CONDUCTING APPROVED PROGRAMS ON A MORE AUSTERE BASIS (continued)

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8. All offset paper stock had previously been purchased precut and prepackaged by a contractor who is now purchasing this paper by the skid and cutting it on an existing machine in-house when needed. Savings of \$7,200 per year are net after deducting an allowance of \$500 for cutting labor.
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1. A review of existing methods shows how graphite machining costs could be reduced \$6000 a year when automatic methods were replaced by manual. In one plant, graphite billets had been clamped into a fixture and a power feed table provided billet travel during machining. The re-evaluation of operations conducted under the cost reduction program indicated that the parts could be made less expensively by utilizing manual hold down and hand feed. A final study showed that manual operations cut the overall time required by 55%.
2. Certain reactor components were subject to distortion and metallurgical damage from the intense heat applied during welding. Stainless steel pads had been used to absorb this heat but damage still occurred. It was found that copper pads provided better heat absorption thereby minimizing heat caused defects.
3. A national laboratory reviewed and simplified their chemistry building radioactive exhaust system. Eighty expensive filters were deleted, and perforated baffles replaced the hood prefilters yielding a total saving of \$14,600, while maintaining the required overall high efficiency.

SPECIFYING OR UTILIZING LESS EXPENSIVE MATERIALS AND COMPONENTS WHICH CAN DO THE JOB CONSISTENT WITH MAINTAINING ESSENTIAL HIGH QUALITY AND PERFORMANCE STANDARDS (continued)

4. A subcontractor supplied trash containers, and charged for trash removal on the basis of container quantity and size without regard for actual weight or volume of trash. As the containers were never filled before hauling, corrected procedures including the use of small containers saved \$14,000 per year at one facility.
5. A steam plant water tank developed a leak in the lower concrete section. Successful conventional repair would require expensive excavation and grouting. As the concrete provides a suitable mechanical support structure, the tank has been fitted with a low-cost vinyl liner that stops the leakage.
6. Corrosion and cracking of brass fittings on CO₂ fire extinguishers has been eliminated through the use of plastic tape. It was planned to replace these brass fittings with stainless steel fittings in locations where the extinguishers are exposed to a corrosive atmosphere. Then it was found that plastic tape wrapped around the brass prevented damage and obviated the need for stainless steel thereby saving \$2000.
7. An investigation of shipping cost revealed that better scheduling of shipments to the Nevada Test Site from Boston allows the use of Deferred Air Service. This class of service has a five day transit time and costs approximately 50% less than regular Air Freight which has one or two day transit time. By careful coordination, the time delay will not affect the operations.
8. In packaging fragile equipment for shipment, many AEC operations formerly used rubberized hair as the cushioning material. In most applications it has been found that expendable polystyrene dunnage could be used with an equal degree of safety and protection to the fragile equipment but at a cost which is 30% less per cubic foot.
9. At an AEC operations office, a manually prepared log book replaced a serialized parts identification system previously prepared by data processing equipment. The log book enables operators to determine which components have been modified or otherwise used in the different reactors. Since the volume of work originally anticipated did not develop, reliability and quality assurance procedures were changed to eliminate the automatic bimonthly updating. On re-evaluation, the log book was found more economical and efficient.

BUYING AT MINIMUM COST CONSISTENT WITH PROGRAM NEEDS:

1. The design agency conceived a better way to do a job, but the practicalities of production showed that the minor improvement was not worth the cost. The fabricator was requested to use a newly designed container for a neutron generator subassembly. Production cost analysis showed the new design would cost \$4000 a year more than the original design and that benefits were not that great. The design change was rescinded.

ACCELERATING INSTALLATION OF TECHNOLOGICAL AND PROCESS IMPROVEMENTS
DESIGNED TO REDUCE OPERATING COSTS:

1. In the course of design review of a research building, unnecessary windows were eliminated from 30 modules. This saved a total of \$4,400 in construction, heating and air conditioning.
2. A support block as used in nuclear reactors is a complicated graphite shape which has thin fragile refractory coating. This coating must be free from even very small defects such as chips and flakes. Support blocks were previously wrapped in a rubber-like material and shipped in wooden boxes and were subject to 15 per cent loss due to breakage. Specially designed styrofoam containers now are used to hold support blocks and shipment is made in cardboard boxes. Breakage has been eliminated. Previously, breakage of approximately \$9,750 could be expected on a \$65,000 set of support blocks. Additional savings of \$175 in shipping container costs were realized. Total savings of \$9,925 per reactor are realized by this packaging improvement.
3. A cooling blower was added to an experimental furnace to extend the life of quartz lamps. Previous lamp life expectancy was one hour, and 42 new lamps (at \$12 each) were required for each test. By installing an \$80 blower, lamp life has been extended to at least 42 hours and probably appreciably more. Savings in excess of \$1000 per year were achieved.
4. An AEC laboratory had been using 7.9 million cubic feet of helium a year to purge fuel element evaluation furnaces. Large quantities of helium were lost through the graphite blocks forming the inner surfaces of the furnace. The graphite joints were sealed with a commercial grease compound containing molybdenum and glycol. The helium usage has been reduced to 3.3 million cubic feet saving \$160,000 per year.

ACCELERATING INSTALLATION OF TECHNOLOGICAL AND PROCESS IMPROVEMENTS
DESIGNED TO REDUCE OPERATING COSTS (continued)

5. The analysis of air for contamination by industrial wastes, internal combustion engine exhaust, or radioactive particulates requires that samples be taken, identified, and analyzed. Personnel at the Y-12 AEC Plant developed and patented a device that reduced air sampling costs by 70%. This new method uses an IBM card containing a filter paper insert in a new inexpensive plastic holder. After 24 hours of sampling, the card is removed, the residue analyzed, the analysis produced on IBM print-out. This method combined the air sample and record in a single unit; eliminates manual handling of data; provides standardization of collection, data processing, and storage.
6. A contractor at the Nevada Test Site designed a standardized system of terminating signal cables. A new type of termination cabinet was designed and submitted to manufacturers for quotation and fabrication. By this action, the conventional cabinets (cost \$34.59 each) were replaced by the more practical and economical cabinets at the unit cost of \$17.58.
7. By the erection of a 1-1/2 foot-high plastic barrier around a test reactor, contamination problems have been reduced by two-thirds and a savings of \$20,000 per year effected. Previously, during reactor shutdowns, air currents moving across the floor carried contaminated particles from the top of the reactor to the surrounding floor. Employees inadvertently tracked contamination throughout the building. The use of the plastic barrier around the reactor has cautioned employees and greatly reduced the spread of radioactivity. The method has proved so economical that it has been extended to other problem areas such as the experimental cubicles where specific experiments are isolated.
8. A method has been devised to transmit data output from the ADP system directly onto a teletype. Previously, it was necessary to employ a flexowriter and operator to transfer data from the computer onto a paper tape then to teletype. Now data is printed on paper tape directly from the computer for use on teletype. A savings of \$4000 per year is realized.
9. Through an employee's suggestion the cost of maintenance on a reactor was substantially reduced and potential damage was eliminated. The flow risers, located within the heat exchangers, were secured in place with six bolts tack welded to a flange. Each time the flow risers were removed for maintenance it was necessary to grind or burn off the tack weld, subjecting the flange to damage. Now the bolt heads are secured by tack welding to a flat bar thereby avoiding the need for welding to the flange.

IMPROVED MANAGEMENT METHODS:

1. Under a recently inaugurated magnetic tape library system, all of the magnetic tapes saved for future use on the CDC 3600 computer are continuously inventoried at a national laboratory. One of the effects of this system is to increase the utilization (turn-over) of the reusable magnetic tapes. This reduced the number of new tapes that must be added to the system, and the amount of storage spaced required, saving \$15,000 per year.
2. A group of mobile operators (with a \$77,000 annual payroll) was formerly needed in the maintenance contractor shops at a laboratory to maintain scientific equipment in serviceable condition. Installation of a monitoring system with a panel that shows the operating condition of 248 major pieces of plant and research equipment is now saving \$59,000 a year.
3. In moving a CDC 6600 computer into a room occupied by an IBM 7094 unit, it was desirable to use as many of the existing elevated 2' x 2' floor panels as possible although the panel penetrations, as arranged, did not match those required for the new computer. Computer techniques and punch cards were used to determine how to reassign these penetrated floor panels for maximum usage in the new installation. As a result of this technique, only one penetrated panel out of a total of sixty-four could not be reused. In addition, 136 unpenetrated panels were relocated in this room.
4. An AEC office had been getting telephone service through "Telpaking," the inclusion of normal circuits in a package arrangement at reduced cost. The telephone company initially refused to include alternate cables in the package arrangement for TELPAK. Then the AEC office requested the General Services Administration, as agent for the government, to appeal the case. At this point, the telephone company granted the request and adjusted rates, including a retroactive credit of over \$15,000.



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

Budget 8-6
Oct 21 1965

B-146930

October 21, 1965

Dear Mr. Seaborg:

Herewith is a copy of our report to the Congress on possible savings by the Atomic Energy Commission through purchasing rather than leasing certain copying machines.

Sincerely yours,

Acting Comptroller General
of the United States

Enclosure

The Honorable Glenn T. Seaborg
Chairman, Atomic Energy Commission

copy E+L-2

10-21-65

UNITED STATES GOVERNMENT

Memorandum

TO : Heads of Divisions & Offices, HQ
Managers of Field Offices

FROM : William H. Slaton, Director
Division of Plans and Reports, HQ

DATE: October 4, 1965

SUBJECT: INNOVATIONS, NEW METHODS AND NEW PROCEDURES WHICH MIGHT BE
APPLICABLE TO OTHER AGENCIES

Copies of the October 1, 1965, report listing cost reduction ideas which might be used by other Government agencies are attached for your information. Your responses to the General Manager's memorandum of July 28, 1965, were very helpful in preparing the report. We have some of this material remaining on hand to be used in the report due on November 1st, but would appreciate receiving before October 15, 1965, any additional items which you might suggest including in the next report.

Since some of the items in the attached report have not been circulated previously, staff members reviewing these ideas should be on the alert for additional opportunities to apply them within AEC operations.

Attachment:
As stated

cc: Harry S. Traynor, Asst. to General Manager
D. A. Ink, Asst. General Manager
Dr. S. G. English, Asst. General Manager for Research
and Development
John A. Erlewine, Asst. General Manager for Operations
George F. Quinn, Asst. General Manager for Plans
and Production
Howard C. Brown, Asst. General Manager for Administration
Dr. J. A. Swartout, Asst. General Manager for Reactors
John A. Hall, Asst. General Manager for International
Activities
John P. Abbadesse, Controller
Brig. Gen. Delmar L. Crowson, Director, Div. of Military
Application
Harold L. Price, Director of Regulation



Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

10-11-65



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

September 29, 1965

Dear Horace:

A second report of cost reduction actions which might be applied in other government operations is attached in response to the President's request. As we mentioned in transmitting the first report, a number of the actions described have been included in previous reports of AEC cost reduction activity but not highlighted in the present context.

This report includes examples specifically recommended by our field office managers as being most likely to be usable for the purposes stated in your memorandum. First year savings from the 26 actions were more than half a million dollars. Even though much of our work may not be closely or clearly related to the work of other agencies, we want to be sure that we do our share toward the aim of pooling and sharing ideas which contribute to the success of cost reduction efforts throughout the Executive Branch.

Cordially,

Chairman

Mr. Horace Busby
Special Assistant to the President
The White House
Washington, D. C.

Attachment:
As stated

U. S. ATOMIC ENERGY COMMISSION

Report of Innovations, New Methods and New Procedures which
Might Be Applicable to Other Agencies

Report date - October 1, 1965

CONDUCTING APPROVED PROGRAMS ON A MORE AUSTERE BASIS:

1. Test samples being irradiated in an Engineering Test Reactor were cooled by air delivered under high pressure by two large compressors. By careful redesign, cooling requirements were met by using reduced air pressure, and the high pressure system was eliminated, reducing costs.
2. The time and expense of keeping technical manuals and stores catalogs current was reduced in one manufacturing plant by placing them in centralized locations. This permitted retirement of more than 1000 plant manuals and catalogs in one year.
3. Requirements called for the submission by contractors of double-spaced drafts for certain reports followed by preparation and submission of single-spaced final versions. This resulted in duplicate typing and duplicate proofreading. Inasmuch as edited drafts have to be submitted in the first place, double spacing is no longer used, thereby eliminating most instances of duplicating typing and proofreading.

SPECIFYING OR UTILIZING LESS EXPENSIVE MATERIALS AND COMPONENTS WHICH CAN DO THE JOB CONSISTENT WITH MAINTAINING ESSENTIAL HIGH QUALITY AND PERFORMANCE STANDARDS:

1. The expensive fitting, pouring, caulking, and field welding needed for repairing leaks in cast iron or steel water pipes has been eliminated at a national laboratory. Stainless steel clamps with neoprene inserts are now used for this type of repair at a lower cost.
2. The use of photo-mechanical methods as a substitute for engineering labor has provided a real savings of a minimum of \$40.00 per large drawing and \$10.00 per small drawing. When a change is required on an existing drawing the portion being changed is cut from the original. Blank paper replaces the removed portion and the revision is made on it by an engineer. The altered drawing is photo-copied and a new original produced. Previously it was necessary to redraft the complete drawing to obtain a reproducible master.
3. Computer tapes are constantly being improved; therefore, reevaluation can be useful. Originally, only the brand of tape provided by the computer manufacturer was used with satisfactory performance at an AEC field office. Evaluation of improved tape offered by other suppliers showed equal performance at a lower cost.

SPECIFYING OR UTILIZING LESS EXPENSIVE MATERIALS AND COMPONENTS WHICH CAN DO THE JOB CONSISTENT WITH MAINTAINING ESSENTIAL HIGH QUALITY AND PERFORMANCE STANDARDS (continued)

4. Since ribbons are replaced daily on computer printout machines, substantial savings can be realized from a small difference in purchase price. An inked ribbon supplied by GSA at \$10 performs as satisfactorily as the \$21 ribbons previously used.
5. An AEC laboratory found that using plastic duct for underground electrical conductors in place of scapstone or cement asbestos duct effected a saving in cost of material and labor. Since the plastic duct is available in longer lengths, fewer joints are required and installation is easier and faster.
6. Gasoline powered buses used at National Reactor Test Station were replaced with diesel powered buses. During the first million miles the cost of the fuel was cut in half following routine replacement.

BUYING AT MINIMUM COST CONSISTENT WITH PROGRAM NEEDS:

1. Many items are purchased in small quantities throughout the year by large cost reimbursement contractors, and each order accumulates all documentation and administrative costs.

One contractor established corporate purchase agreements that achieved lower unit costs by consolidating all anticipated purchases throughout the corporation yet provided for as-needed delivery throughout the year. Additional savings result from reduced paperwork.
2. Periodic surveys to eliminate items from warehouse stock continue to yield dividends. Recently, in one plant, after finding that only 85 out of 31,000 items were issued more than 50 times in six months, a study of the cost of purchasing rather than stocking items which can be delivered within 12 hours from supply houses was intensified. The cost of warehouse space, inventory, stocking, issuing, etc., was found to be excessively high for rarely used items. Significant cost reductions are anticipated as a result of eliminating many of these items from warehouse stock.
3. Freight rates quoted to AEC contractors on commonly used materials are systematically compared with rates prevailing in other parts of the country. Those rates which appear excessive are energetically renegotiated.
4. Under a continuing program for analyzing product defects, it was noted that accidental damage during testing of certain electronic assemblies and subassemblies was causing product losses of approximately \$21,000 a year at one contractor location. A change in the test sequence and cable connections now prevents the accidental application of damaging voltage during testing.

ACCELERATING INSTALLATION OF TECHNOLOGICAL AND PROCESS IMPROVEMENTS DESIGNED TO REDUCE OPERATING COSTS:

1. Fly ash from a coal fired electrical power generation plant is now sold to a nearby cement producer. Steps have been taken to maximize fly ash collection while minimizing collection cost. The entire recovery and sale saves the USAEC about \$28,000 annually.
2. A contractor's engineering department developed a digital tape translator to take information recorded at the Nevada Test Site and change it more rapidly into a form suitable for processing by computer. Savings are made by shaving time from the production of logic circuits for the computer, and from a system of using the computer to optimize wiring layouts, prepare wiring charts, and to trouble-shoot errors. Hundreds of manhours spent on routine drafting and checking have been saved.
3. At a process plant which normally requires cooling water supplied under pressure, the operator found that procedures for stopping pump motors and reducing cooling water to gravity flow could be accomplished satisfactorily during certain process shutdown periods and has reduced the consumption of electrical power correspondingly.
4. An AEC laboratory is currently using a sound pickup technique in its testing of nuclear reactor pressure vessels in order to detect cracks. The contractor has made significant progress in developing a method for tracing progress of a crack and arresting the growth before it reaches critical length. The sound pickup technique was applied, and a good transducer to pick up the sonic energy released by the growing crack proved to be a piezoelectric strain gauge that has good frequency response beyond 10 megacycles per second. The technique could be used to test typical reactor pressure vessel steels to determine crack propagation and rupture properties under multiaxial loading or to test ordinary pressure vessels for containing gases, liquids, steam, etc.
5. At one AEC operations office, the addition of an X-Y Digital Plotter to the Health and Safety Laboratory's existing IBM 1630 computer has resulted in a substantial savings in time to the scientific staff. By eliminating the time consuming and tedious work involved in hand-plotting graphic presentations, the Digital Plotter has enabled scientific staff to perform more research without an increase in staff.

IMPROVED MANAGEMENT METHODS:

1. The AEC publishes and distributes changes to its regulations. Under past practice, changes were additive and usually distributed late. The service is now offered through the Government Printing Office at \$3.50 for a two-year subscription instead of the former \$9.00 rate. It is issued on time, in loose-leaf form, is completely cross-referenced,

IMPROVED MANAGEMENT METHODS (continued)

and includes original statements of consideration plus all proposed rule-making actions under active consideration. The expanded and improved service is made possible at a lower cost by replacement of original type-set process with paste-up and photo-offset reproduction.

2. It has been found that telephone message tape recorders can handle incoming messages in certain offices whose occupants are usually in the field, at lower cost than a full-time telephone receptionist.
3. Continuing review of security requirements and downgrading them wherever possible yields significant savings. One contractor saved \$30,000 in document controls on the Systems for Nuclear Auxiliary Power (SNAP) program alone when most aspects were downgraded from "Secret" to "Confidential" classification.
4. Production losses and time spent in maintaining cognizance and records of union representative activity has been reduced at one plant by working out with the union a restriction on the number of hourly employees attending grievance hearings.
5. Frequently shipments of general commodities by rail require blocking and bracing within the ordinary box cars to avoid damage in transit. Box cars permanently equipped with load securing or restraining equipment (damage free) are more convenient and economical. The western railroads have many cars so equipped; however, in the East shippers frequently have difficulty getting such cars. Rather than spending money on carpenters and lumber, one AEC operations office found the desired equipment can be obtained from the western railroads participating in an east to west shipment at a net saving to the shipper.
6. Design and development by a university contractor of an IBM-7094-B-11 diprogramming monitor system resulted in an effective gain of 40% in computer utilization. Diprogramming enables large computers to perform useful work on two problems simultaneously. It was found that 84% of the computer time can be utilized performing simultaneous operations on the two problems. The one thing that cannot be done simultaneously is the actual computation for each problem which accounts for the remaining 16% of computer time.
7. Although the practice may not be uncommon, a supermarket type self-service supply center was established by a contractor which reduced waiting time for supplies and the number of supply clerks. Users now help themselves to the items they need (which they place in a shopping basket) and then go to a check-out point where their requisitions are recorded.

IMPROVED MANAGEMENT METHODS (continued)

8. Silver-bearing photographic ("hypo") solution was formerly discharged into the plant waste system. An analysis indicated that the approximately 1000 gallons of solution used each month contained approximately 500 troy ounces of suspended silver. Arrangements have been made, with the help of GSA, to sell the waste solution to a local firm which 'reclaims the silver. This recovery practice is not unique but may have been overlooked in some installations.

