

10/29/79 [1]

Folder Citation: Collection: Office of Staff Secretary; Series: Presidential Files; Folder: 10/29/79
[1]; Container 137

To See Complete Finding Aid:

http://www.jimmycarterlibrary.gov/library/findingaids/Staff_Secretary.pdf

WITHDRAWAL SHEET (PRESIDENTIAL LIBRARIES)

FORM OF DOCUMENT	CORRESPONDENTS OR TITLE	DATE	RESTRICTION
memo	From Brzezinski to The President (one page) re: Delegation to the Funeral of President Park / enclosed in Hutcheson to Brzezinski 10/29/79 <i>opened per RAC NLC-126-19-4-1-6 12/2/13</i>	10/29/79	A
memo w/ att.	From Brzezinski to The President (2 pp.) re: Presidential Commission on US-Liberian Relations / enclosed in Hutcheson to Brzezinski 10/29/79	10/23/79	A

FILE LOCATION

Carter Presidential Papers- Staff Offices, Office of the Staff Sec.- Pres.- Handwriting File 10/29/79 [1] BOX 154

RESTRICTION CODES

- (A) Closed by Executive Order 12356 governing access to national security information.
- (B) Closed by statute or by the agency which originated the document.
- (C) Closed in accordance with restrictions contained in the donor's deed of gift.

THE WHITE HOUSE
WASHINGTON
29 Oct 79

Stu Eizenstat

The attached was returned in
the President's outbox today
and is forwarded to you for
appropriate handling.

Rick Hutcheson

ADMINISTRATIVELY CONFIDENTIAL

<input type="checkbox"/>	FOR STAFFING
<input type="checkbox"/>	FOR INFORMATION
<input checked="" type="checkbox"/>	FROM PRESIDENT'S OUTBOX
<input type="checkbox"/>	LOG IN/TO PRESIDENT TODAY
<input type="checkbox"/>	IMMEDIATE TURNAROUND
<input type="checkbox"/>	NO DEADLINE
<input type="checkbox"/>	FOR APPROPRIATE HANDLING
<input type="checkbox"/>	LAST DAY FOR ACTION

*hand carry
to
KAThey*

ACTION
FYI

<input checked="" type="checkbox"/>	ADMIN CONFID
<input type="checkbox"/>	CONFIDENTIAL
<input type="checkbox"/>	SECRET
<input type="checkbox"/>	EYES ONLY

<input type="checkbox"/>	VICE PRESIDENT
<input type="checkbox"/>	JORDAN
<input type="checkbox"/>	CUTLER
<input type="checkbox"/>	DONOVAN
<input checked="" type="checkbox"/>	EIZENSTAT
<input type="checkbox"/>	MCDONALD
<input type="checkbox"/>	MOORE
<input type="checkbox"/>	POWELL
<input type="checkbox"/>	WATSON
<input type="checkbox"/>	WEDDINGTON
<input type="checkbox"/>	WEXLER
<input type="checkbox"/>	BRZEZINSKI
<input type="checkbox"/>	MCINTYRE
<input type="checkbox"/>	SCHULTZE
<input type="checkbox"/>	
<input type="checkbox"/>	ANDRUS
<input type="checkbox"/>	ASKEW
<input type="checkbox"/>	BERGLAND
<input type="checkbox"/>	BROWN
<input type="checkbox"/>	CIVILETTI
<input type="checkbox"/>	DUNCAN
<input type="checkbox"/>	GOLDSCHMIDT
<input type="checkbox"/>	HARRIS
<input type="checkbox"/>	KREPS
<input type="checkbox"/>	LANDRIEU
<input type="checkbox"/>	MARSHALL

<input type="checkbox"/>	MILLER
<input type="checkbox"/>	VANCE
<input type="checkbox"/>	
<input type="checkbox"/>	BUTLER
<input type="checkbox"/>	CAMPBELL
<input type="checkbox"/>	H. CARTER
<input type="checkbox"/>	CLOUGH
<input type="checkbox"/>	CRUIKSHANK
<input type="checkbox"/>	FIRST LADY
<input type="checkbox"/>	FRANCIS
<input type="checkbox"/>	HARDEN
<input type="checkbox"/>	HERTZBERG
<input type="checkbox"/>	HUTCHESON
<input type="checkbox"/>	KAHN
<input type="checkbox"/>	LINDER
<input type="checkbox"/>	MARTIN
<input type="checkbox"/>	MILLER
<input type="checkbox"/>	MOE
<input type="checkbox"/>	PETERSON
<input type="checkbox"/>	PRESS
<input type="checkbox"/>	SANDERS
<input type="checkbox"/>	SPETH
<input type="checkbox"/>	STRAUSS
<input type="checkbox"/>	TORRES
<input type="checkbox"/>	VOORDE
<input type="checkbox"/>	WISE

THE WHITE HOUSE
WASHINGTON

October 26, 1979

Stu
ok
J

PERSONAL AND ~~CONFIDENTIAL~~

MEMORANDUM FOR THE PRESIDENT

FROM: STU EIZENSTAT *Stu.*

SUBJECT: Lake Alma

I met yesterday with Joe Tanner and Leonard Ledbetter of the Georgia Department of Natural Resources, Cliff Alexander and Mike Blumenfeld of the Department of the Army, and Doug Costle, head of EPA on the Lake Alma matter.

Tanner and Ledbetter presented a strong defense of the project in terms of its environmental impact and stressed the fact that they had been leaders in protecting wetlands in Georgia. They transmitted written information which we will be reviewing.

The matter stands as follows: the Corps of Engineers feels that a 404 permit should be issued. EPA will review the Corps' decision and give their opinion to the Corps. It is my belief that we should let Doug make a call on this based on his objective review of the record. I have asked Doug to talk to me about this before he puts anything in writing.

My recommendation is that we live with whatever recommendation comes out of the normal agency process. I will be glad to talk to you about this matter at your pleasure. >

**Electrostatic Copy Made
for Preservation Purposes**

**"DETERMINED TO BE AN ADMINISTRATIVE MARKING
CANCELLED PER E.O. 12958, SEC. 1.3 AND
ARCHIVAL'S MEMO OF MARCH 15, 1983"**

THE WHITE HOUSE
WASHINGTON

10/29/79

CV Small

The attached was returned in
the President's outbox today
and is forwarded to you for
appropriate handling.

Rick Hutcheson

Please date.

4758

THE WHITE HOUSE

WASHINGTON

October 26, 1979

MEMORANDUM FOR: THE PRESIDENT
FROM: FRANK MOORE *FM*
SUBJECT: Letters to Senators Huddleston
and Morgan

I believe it would be appropriate for you to send these letters to Dee Huddleston and Bob Morgan after their very useful remarks at the SALT briefing on Wednesday, October 24.

(Speechwriters have cleared.)

THE WHITE HOUSE

WASHINGTON

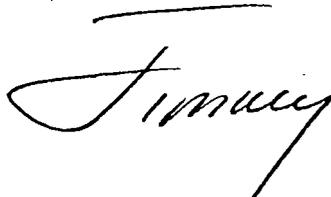
Dear Dee:

I think that the SALT briefing with your constituents on Wednesday, October 24 went very well.

Your remarks concerning the verifiability of the Treaty were particularly helpful. Dr. Brzezinski, General Seignious and I have made similar points in our statement. Your strong comments on the subject, therefore, were extremely significant.

I look forward to working with you closely and appreciate your support.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jimmy", with a horizontal line above the first few letters.

The Honorable Walter D. Huddleston
United States Senate
Washington, D. C. 20510

THE WHITE HOUSE

WASHINGTON

Dear Robert:

The SALT briefing with your constituents on Wednesday, October 24 went particularly well. I am glad that you were here with us.

The question of verification has come up at every one of our briefings. Your remarks on the subject were therefore particularly helpful.

I look forward to working with you on the Treaty and hope that I will have your support.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jimmy".

The Honorable Robert Morgan
United States Senate
Washington, D. C. 20510

THE WHITE HOUSE

WASHINGTON

10/29/79

Charlie Schultze

The attached was returned in
the President's outbox today
and is forwarded to you for
appropriate handling.

Rick Hutcheson

CHRYSLER AND INFLATION

4778

THE WHITE HOUSE
WASHINGTON
29 Oct 79

Zbig Brzezinski

The attached was returned in
the President's outbox today
and is forwarded to you for
appropriate handling.

Rick Hutcheson

Frank Moore

~~CONFIDENTIAL~~

1759

DECLASSIFIED

Per: Rac Project

ESDN: NLC-126-19-4-1-6

BY RS NARA DATE 11/21/13

<input type="checkbox"/>	FOR STAFFING
<input type="checkbox"/>	FOR INFORMATION
<input checked="" type="checkbox"/>	FROM PRESIDENT'S OUTBOX
<input type="checkbox"/>	LOG IN/TO PRESIDENT TODAY
<input type="checkbox"/>	IMMEDIATE TURNAROUND
<input type="checkbox"/>	NO DEADLINE
<input type="checkbox"/>	FOR APPROPRIATE HANDLING
<input type="checkbox"/>	LAST DAY FOR ACTION

DECLASSIFIED

Per: Rac Project

ESDN; NLC-126-19-4-7-6

BY: KS NARA, DATE 4/21/13

<input type="checkbox"/>	ADMIN CONFID
<input checked="" type="checkbox"/>	CONFIDENTIAL
<input type="checkbox"/>	SECRET
<input type="checkbox"/>	EYES ONLY

ACTION
FYI

<input type="checkbox"/>	VICE PRESIDENT
<input type="checkbox"/>	JORDAN
<input type="checkbox"/>	CUTLER
<input type="checkbox"/>	DONOVAN
<input type="checkbox"/>	EIZENSTAT
<input type="checkbox"/>	MCDONALD
<input checked="" type="checkbox"/>	MOORE
<input type="checkbox"/>	POWELL
<input type="checkbox"/>	WATSON
<input type="checkbox"/>	WEDDINGTON
<input type="checkbox"/>	WEXLER
<input checked="" type="checkbox"/>	BRZEZINSKI
<input type="checkbox"/>	MCINTYRE
<input type="checkbox"/>	SCHULTZE
<input type="checkbox"/>	
<input type="checkbox"/>	ANDRUS
<input type="checkbox"/>	ASKEW
<input type="checkbox"/>	BERGLAND
<input type="checkbox"/>	BROWN
<input type="checkbox"/>	CIVILETTI
<input type="checkbox"/>	DUNCAN
<input type="checkbox"/>	GOLDSCHMIDT
<input type="checkbox"/>	HARRIS
<input type="checkbox"/>	KREPS
<input type="checkbox"/>	LANDRIEU
<input type="checkbox"/>	MARSHALL

<input type="checkbox"/>	MILLER
<input type="checkbox"/>	VANCE
<input type="checkbox"/>	
<input type="checkbox"/>	BUTLER
<input type="checkbox"/>	CAMPBELL
<input type="checkbox"/>	H. CARTER
<input type="checkbox"/>	CLOUGH
<input type="checkbox"/>	CRUIKSHANK
<input type="checkbox"/>	FIRST LADY
<input type="checkbox"/>	FRANCIS
<input type="checkbox"/>	HARDEN
<input type="checkbox"/>	HERTZBERG
<input type="checkbox"/>	HUTCHESON
<input type="checkbox"/>	KAHN
<input type="checkbox"/>	LINDER
<input type="checkbox"/>	MARTIN
<input type="checkbox"/>	MILLER
<input type="checkbox"/>	MOE
<input type="checkbox"/>	PETERSON
<input type="checkbox"/>	PRESS
<input type="checkbox"/>	SANDERS
<input type="checkbox"/>	SPETH
<input type="checkbox"/>	STRAUSS
<input type="checkbox"/>	TORRES
<input type="checkbox"/>	VOORDE
<input type="checkbox"/>	WISE

THE WHITE HOUSE
WASHINGTON

Mr. President:

V.P. speaks at J-J
dinner on the 3rd in
Iowa - would be
disastrous for him to
miss dinner.

J.F.

~~CONFIDENTIAL~~

MEMORANDUM

THE WHITE HOUSE
WASHINGTON

~~CONFIDENTIAL~~

October 29, 1979

MEMORANDUM FOR: THE PRESIDENT
FROM: ZBIGNIEW BRZEZINSKI *ZB*
SUBJECT: U.S. Delegation to the State Funeral
for Korean President Park

Cy Vance has sent you a memo citing the Vice President as his first choice to lead the U.S. delegation to the State Funeral of President Park in Seoul Saturday November 3. His second choice is Harold Brown.

The Vice President would be my first choice, too. His presence would match the high level of the Japanese delegation led by Prime Minister Ohira, provide dramatic evidence of our continued support for the Korean nation and enhance our ability to influence the new government. Harold Brown would be an appropriate alternate.

Recommendation

That you choose as leader of the U.S. delegation:

Vice President Mondale

Approve _____ Disapprove ✓

Secretary Brown

Approve _____ Disapprove _____

*Either Vance
Brown } + Chip
Schlesinger }*

DECLASSIFIED
Per: Rac Project
ESDN: NLC-126-19-4-1-6
BY: *K9* NARA DATE *11/31/13*

~~CONFIDENTIAL~~

THE CHAIRMAN OF THE
COUNCIL OF ECONOMIC ADVISERS
WASHINGTON

October 26, 1979

MEMORANDUM FOR THE PRESIDENT

From: Charlie Schultze *CLS*
Subject: Inflation and Chrysler

*Charlie -
Discuss Bill &
Fred & Stu. This
assessment should
be made public
as a factor in
the upcoming
debate
J*

Last week, I discussed with you a relatively gloomy prognosis for unemployment and inflation over the next several years: no matter what budget, fiscal, and monetary options we pursue, both inflation and unemployment will remain far higher than acceptable.

After some reflection, it dawned on me that the Chrysler situation is a perfect illustration of why we are in this fix.

Tight money and budget restraint are supposed to contain inflation by creating some economic slack, thereby making it difficult for business and labor to raise prices and wages excessively. If price and wage decisions were sensitive to the threat of reduced sales and loss of jobs, then only a small amount of economic slack and unemployment would lead to a quick and sharp reduction in inflation. Even if inflation came from outside sources (like OPEC price increases) it would only take a small degree of slack to keep energy inflation from spilling over to the rest of the economy.

But the key fact about modern economies is that price and wage inflation is not very sensitive to economic slack and unemployment. Moderate applications of monetary and fiscal restraint do not lead business and labor to change their wage and price behavior very much. Chrysler is the perfect example of this phenomenon. At the edge of a nationwide recession, and faced by the threat of permanent job loss through the bankruptcy of their employer, the UAW has successfully secured not merely job protection, but job protection with a 31 percent pay increase (plus a yet undetermined additional amount for fringe improvements). According to press accounts of the Chrysler-UAW settlement,

**Electrostatic Copy Made
for Preservation Purposes**

the only real concession they have made is to postpone by some months each year the effective date of the very large pay raise. If the employees of a company can win a 31 percent pay raise in the face of bankruptcy and permanent job disappearance, in a city where new jobs are hard to find, it is small wonder that the threat of modest and temporary cutbacks in employment opportunities produce very little by way of wage restraint. (The same is true on the price side.)

The 31 percent Chrysler-UAW wage increase (calculated on the assumption of a 9 percent rate of inflation) is composed of two parts: a 3 percent per year annual improvement factor plus a "rich" cost-of-living clause that protects workers against about 75 percent of inflation (and gets substantially better in the third year of the contract).

Foregoing the 3 percent annual improvement factor would make available about \$520 million to Chrysler over the next three years (and \$265 million for each additional year). Keeping the annual improvement factor, but foregoing the cost-of-living protection, would make \$1.7 billion available to Chrysler over the three year period.

Even if Chrysler workers are not asked to give up any of their wage increase relative to GM or Ford, shouldn't they be required to take some of it in company stock? Certainly when a company is on the verge of bankruptcy, a group of workers (who are higher paid than the average American worker) who want job protection from the city, state, and Federal coffers could legitimately be asked to take out 10 or 15 percent of their 30 percent wage increase in the form of company stock. (This would make the cash available to Chrysler, but would give the workers a chance to get back their foregone wages if Chrysler survived.)

(In 1975, Eastern Airlines -- which was not in as bad a shape as Chrysler -- got its workers to accept a one year postponement of a wage increase, and in return made them eligible for a profit-sharing scheme.)

THE CHAIRMAN OF THE
COUNCIL OF ECONOMIC ADVISERS
WASHINGTON

October 29, 1979

MEMORANDUM FOR THE PRESIDENT

From: Charlie Schultze ^{CLS}

Subject: Numerical error in earlier Chrysler memo

Friday I sent you a memo noting our rough estimate that if Chrysler workers would forego the cost-of-living protection in their wage contract for three years this would make \$1.7 billion available to Chrysler. The number should have been \$1.1 billion; the higher number represents the cash made available if the total wage increase were postponed for three years.

**Electrostatic Copy Made
for Preservation Purposes**

THE WHITE HOUSE
WASHINGTON
10/29/79

Stu Eizenstat

The attached was returned in
the President's outbox today
and is forwarded to you for
appropriate handling.

Rick Hutcheson

THE WHITE HOUSE
WASHINGTON
October 22, 1979

*Stu -
Good work -
excessively -
Memo
J*

MEMORANDUM FOR: THE PRESIDENT
FROM: STU EIZENSTAT *Stu*
AL STERN
SUBJECT: Industrial Innovation DPR

Attached is a joint memorandum from Jim McIntyre, Frank Press, and myself summarizing the recommendations from the study of industrial innovation. This study, under the DPS Domestic Policy Review system (others already completed this year under the DPR system are National Health Insurance, your privacy initiative, and your Solar Program) has been going on for a year. There has been extensive outside involvement. It is of great interest to the small business community in particular. There are two decisions that require your attention: one concerns the level of a new program to foster the development of generic technology (pp. 7 - 8), and the other concerns the allocation of patent rights from Federally sponsored R&D (pp. 10-15).

The issue of industrial innovation (and our study of it) has attracted wide media attention in Time, Newsweek, Business Week, Wall Street Journal, N.Y. Times, L.A. Times, and others. The media reflects the general public view that encouraging innovation is important. The announcement of your innovation study heightened the public concern with this issue and we should retain the initiative on it. Innovation seems to be one of these same issues that has public appeal, and few drawbacks.

Let me offer my assessments of the two particular issues on which your decision is necessary. The first -- the level of the program for generic technology -- is not merely a dispute between the cautious and the aggressive. The centers will be a visible reflection of your concern for innovation and I believe that the announcement of a large number of centers will prove useful. This is particularly the case since we have all agreed to drop all tax incentives to encourage innovation. Thus, without a significant number of centers, our effort may look pale in comparison to the problems we have addressed.

**Electrostatic Copy Made
for Preservation Purposes**

The second issue -- the allocation of patent rights arising from Federally sponsored R&D -- has some controversial components. There is considerable Hill opposition to the option favored by many of the agencies and by OMB. Moreover, that option, which would allow the contractor to retain title to the patents, will be seen by many as an excessive give away to industry. It is my view that Option A may present excessive risks. The strategy of Option A was presented to the 95th Congress by Congressman Thornton. It was strenuously opposed by Senators Long and Nelson, Admiral Rickover, and by the Department of Justice on the basis that its blanket rule was a "give away" to industry. Public interest groups also oppose this approach on the same grounds. It will be particularly difficult to defend the unqualified ceding of title to inventions developed with taxpayers dollars to energy companies by the DOE. Option C is backed by the Justice Department which for the past 30 years has opposed any other proposed change in Government policy. Option C produces some movement in use of Federal patents and research, is least likely among the options to be viewed as an unrestricted give away and does for the first time give the entire Government a consistent policy. It is for this reason that I recommend it.

You should know that Senator Kennedy has recently attached himself to the innovation and patent policy problems and he is expected to reveal his program very shortly. We should keep the initiative on what is an important issue for our country.

I am also attaching a letter from Jordan Baruch, Assistant Secretary of Commerce for Science and Technology, who has led this DPR on innovation with enormous skill, ability, and dedication. He has won virtually universal acclaim for his effort. The letter provides to you a sense of the importance of this issue. I endorse his comments and therefore will not repeat them here.

THE WHITE HOUSE

WASHINGTON

October 22, 1979

MEMORANDUM FOR THE PRESIDENT

FROM: STU EIZENSTAT
JIM McINTYRE
FRANK PRESS

Stu (by 10/28)
FP

SUBJECT: The Domestic Policy Review of Industrial Innovation

Industrial innovation -- the development and commercial introduction of new products and processes -- has been an important ingredient in the long-term strength of the American economy. It is a major factor in our economic growth, and has a significant influence on productivity enhancement, on the development of a favorable balance of trade, on the creation of jobs, and in the improvement of the quality of life of American citizens. Moreover, innovation is central to the solution of many of the problems that we confront as a Nation -- providing new energy supply or using our existing supply more efficiently, ensuring adequate food for a growing world population, protecting our environment, and improving our health care.

Some other countries subsidize innovation. They are attempting to obtain or extend their world competitive advantage and market dominance through successful implementation of industrial policies, programs, and institutional structures aimed at advancing selected industrial technologies. The current challenge to the U.S. economy and to the competitive position of U.S. industry in foreign and domestic areas will depend on developing an effective response to these foreign efforts. The fact that industrial innovation is an important and acceptable step in that process is reflected by the rate at which bi-partisan bills on the subject are cropping up in the Congress.

Unfortunately, we tend to think of the inventiveness of American industry as an inevitable birthright. But complacency is inappropriate. There is a widely held perception that the rate of U.S. industrial innovation is declining; along with this is a belief that efforts to improve and enhance the innovation process can contribute to the solution of our national problems. Despite this fact, the nurturing of innovation has been heretofore a distinctly secondary Federal objective. As a result, a Domestic Policy Review was undertaken under the leadership of the Department of Commerce to address the question:

What actions should the Federal Government take to encourage industrial innovation?

This memorandum is to report on that effort and to seek your guidance on some unresolved issues. The proposals and initiatives have been combined into eight sections:

1. Overview
2. Increasing Technical Knowledge
3. Improving the Patent System
4. Clarifying Antitrust Policy
5. Fostering the Development of Smaller Innovative Firms
6. Federal Procurement and Regulation
7. Labor and Innovation
8. Other Recommendations

Because innovation requires an investment decision at the level of the individual firm, it is controlled by the firm's ability to innovate and its decision to innovate. Ability is determined by the resources available such as capital; skilled personnel; scientific, technical and market information and time. The decision is determined by the ratio of the payback expected from investing in the innovation to the payback expected from the next best available investment. Each of the seven strategies into which we have organized this memorandum focuses on either influencing that decision or supplying missing resources.

In order that your innovation message be as strong as possible we have, in addition to items requiring your decision, briefly described in this memorandum those actions that are either already under way, are being done at the Department level, or have sufficient interagency and EOP support to make a decision by you unnecessary.

Two attachments are included:

Appendix 1) The review has produced, as expected, many suggestions for using the tax system as an incentive for innovation. Given the present Administration position of not introducing new tax initiatives at this time, tax measures are not recommended as part of this DPS. However, we are attaching a list of those tax measures, which were they enacted, would positively influence the rate of innovation. They may be considered if and when another tax initiative is appropriate.

Appendix 2) A short summary of the analytical framework which underlies the policy formulations.

I. OVERVIEW

Industrial innovation is primarily the responsibility of the private sector. In our economic system, the manager of a firm must decide whether to develop and market innovative new products or whether to find and employ new ways of making existing products. Since new products may offer opportunities for increased sales, and since new processes can offer cost savings, the profit motive provides a powerful stimulus to innovative activity by the private sector. There are also some occasions where the social and public benefits exceed the private benefits and in those instances, there is a governmental interest.

While it is the private decisionmaker who determines whether innovation takes place, the Federal government can establish a climate that either encourages or discourages innovative activity. Nearly all the policy instruments used by Government can have an impact on business decisions. In order to get a sense of the opportunities for effective modification of policy, we have consulted with many groups from industry, labor, academia, and public interest organizations. A long list of suggestions embodied in the task force reports was created by 150 of these people. Their recommendations have been reviewed, culled, and the results combined into this report. The recommendations that have survived this process are generally either designed to develop a critical missing resource or to influence decisionmakers in the direction of innovation.

Industrial leaders agree that the general economic climate is the most important factor influencing private sector decisions to undertake innovative activity. Innovation can be expensive and they cite the problems of assuring an adequate flow of investment capital and dealing with the impacts of inflation. They also claim that the burdens created by regulations -- how regulatory uncertainty, the capital diverted to compliance, and the focus of decisionmakers on compliance deadlines -- have shifted attention from investment in "breakthrough" products or processes.

Although we understand the industry view that the issues of inflation, and of tax and regulatory policies are important elements in a program to enhance innovation, for the most part, the Domestic Policy Review recommendations chose not to address these issues. In our judgment, these issues are entangled with broad economic policy and political considerations that extended far beyond the proper sphere of appropriate recommendations for this study. (See Appendix I for a brief survey of tax measures that have been suggested by industry.) Moreover, because nearly

every Federal action has some direct or indirect impact on innovation and because of the limitations of our knowledge concerning the innovation process, no one study could frame an all-encompassing strategy that would lead assuredly to a resurgence in industrial innovation. Although the Domestic Policy Review has identified some helpful and significant first steps, the recommendations are an early skirmish in what we now see must be a continuing battle to maintain the technological strength of the American economy.

In light of the fact that the study could not respond completely to the interests of the private sector, we believe it is important to characterize the Domestic Policy Review as revealing only the first steps in meeting our commitment to this issue. Perhaps the most significant action you can take is to provide a signal to the private sector that innovation is important and that it is our Federal policy to seek to preserve it and promote it in the years ahead. The package of recommendations which follows, combined with the other ongoing activities, will clearly signify your Administration's interest in improving the rate of innovation and establishing, over time, a climate in which it will flourish.

II. INCREASING TECHNICAL KNOWLEDGE

Scientific and technical information is created largely by universities, government laboratories, industrial laboratories and by similar activities abroad. It becomes the knowledge needed in industrial innovation when it is relevant to industry's problems or opportunities and when it is effectively transferred to the industry user. Several of our proposed actions in this section deal with improving the transfer of existing, potentially relevant information; three deal with improving the rate at which we create such information.

A. TRANSFER OF EXISTING INFORMATION

1. The NTIS Center for Utilizing Federal Technology

The Federal Government annually undertakes approximately \$10 billion of R&D at Federal laboratories and Federally Funded R&D Centers. These institutions, while responsive to the needs of the sponsoring agencies and industries directly involved in the missions of those agencies, are generally poorly linked to the wide variety of other industries.

The National Technical Information Service (NTIS) has long provided a channel of communication with industry concerning research results. Through its pattern of requests, it has a broad understanding of industry needs, and through its cataloging, it has a broad knowledge of Federal laboratory activity. It therefore is in the position to help inform industries of technological opportunities of which they might otherwise be uninformed.

We therefore agree that the NTIS program be enhanced by the creation of a Center in NTIS with the mission of improving the flow of knowledge from Federal laboratories and R&D Centers to industries outside the mission agencies' purview. The FY 1981 cost of the program will be \$1.2 million and subsequent year costs will not exceed \$2 M/year.

2. Foreign Technology Utilization

Foreign technological and scientific advances are becoming increasingly important but relatively untapped sources of technological information for American innovation. An inadequate ability exists within the Federal Government and within industries to gather, analyze, organize, and disseminate information regarding foreign research and development activities that bear on the competitiveness of U.S. industry. Other countries have multiple science and technical counselors assigned to embassies and trade offices in industrial nations in order to gather such information. Because of the commitment to reducing our overseas employment, we are proposing two other actions:

a. Foreign Literature Program

The NTIS will include extensive foreign technical literature collection and translation in its present activities. Such a move will make relevant foreign literature available to industry. The first year program cost will be \$1.8 M. Depending on our ability to get the user firms and associations to share this effort, subsequent year costs will be lower.

b. Non-Literature Information

Unpublished information about foreign technology currently flows into the U.S. from a wide range of sources including industry, our embassies, visitors, our intelligence agencies and industry's contacts. No structure exists for coordinating, checking, organizing, and disseminating that information. By contrast the Marubeni Corporation, only one of Japan's major trading companies spent \$27 M on gathering, organizing, and communicating foreign information - largely technical - in 1978.

To correct that deficiency:

The Departments of State and Commerce will rewrite the job descriptions of our science and technical counselors overseas to provide for technical information collection. The DOC Office of Science and Technology will interview volunteer returning U.S. overseas visitors about observed foreign technological developments, collect reports from the science counselors, and collect photographs, and other unpublished information. They will merge this information with the NTIS data base on foreign technical literature to make it widely and easily available to industry. The 1981 cost of this program will be \$2.4 M. Depending on the demand for the services and the participation by industry, subsequent year costs may be somewhat higher or lower.

B. CREATION OF RELEVANT INFORMATION

1. Cooperative Development of Generic Technologies

The Federal Government supports a broad range of R&D activities from basic research through applied research, development and demonstration in areas of interest to industry. Most of this work is to meet some specific social or national need, as in the case of energy development or defense, or to provide a foundation for future advance, as in the case of basic research. Unlike many foreign countries -- most notably Germany and Japan* -- the U.S. does not make major direct Governmental investments in the development of technologies merely because of their predicted commercial significance. We hold to the view that the private sector will be more efficient than Government in the choice and development of products that lead to commercial advantage.

Nonetheless, all your advisers agree that there is a Federal role in the development of generic technologies -- that is, technologies that underlie industrial processes and that cut across the operations of many industrial sectors. Examples might include welding and joining, robotics (automated assembly), corrosion prevention and control, non-destructive testing and performance monitoring, and tribology (the science of lubricants). Because the benefit from advances in a generic technology to any one firm (or even one industrial sector) may be small, there is less investment in the development of generic technologies than would be justified by the benefits that flow from these activities. Advances in this area have the potential for substantial cumulative impact because the technologies are so pervasive.

Under this program, non-profit centers -- at universities or other private sector sites -- would be selected to develop and transfer generic technologies. Each of the centers will be targeted on a technology that is involved in the processes of several industrial sectors, and has the potential for significant technological upgrading. DOC has supplied a list of over 20 generic technologies that fit these criteria. It would not supplant efforts in the private sector that are designed for specific product development. The operations of each center will be guided by a strategic plan developed in consultation between the funding agency, the affected industrial sectors, and the relevant research communities. Where possible,

*Unlike Germany and Japan, a major share of the U.S. R&D effort is directed to defense, e.g., in 1975, Japan spent 2% on defense and 23% on economic development compared with U.S. expenditures of 51% for defense and 9% for economic development. In its current budget, Germany has committed DM 300 million for stimulation of research for commercial purposes in small and medium sized industry.

For
industrial
issues,
part of
energy
proposal
(\$7 1/2 bil
in 10 yrs)

each center will be jointly financed by industry and Government, with the Government's share dropping to 20% or less of the Center's cost in the fifth year. Since several agencies would ultimately participate in the program, the Department of Commerce would be tasked to assure that the activities are coordinated.

While your advisers agree on the form of the program, we need your guidance on its appropriate scope in FY 81:

Option A.

This option proposes the launching of 15 centers in FY 81 (7 or 8 by DOC, 4 or 5 by NSF, 3 by other agencies) at locations of existing strength, if possible, in the relevant technical areas. The size of the Center would be determined by the nature of the problem. The successful Polymer Center that has been established by the NSF and the extensive planning by the DOC provide a model for the centers and the groundwork for rapid and successful implementation. It is expected that sites for the selected centers can be chosen by early Spring 1980 and announcements made shortly thereafter. This option provides a highly visible and broadly based program.

Option B.

This option proposes establishment of at least 4 centers in FY 81 (3 in DOC, 1 in NSF). Based on the NSF experience with the successful Polymer Center, it is estimated that some centers can be funded for less than \$1-2 million per year. Each agency would have the flexibility to determine the most appropriate size for centers, depending on the nature of proposals received. In future years, the size of the program would depend on the interest and support shown by the industrial and research communities, the quality of proposals received, and the experience gained from this experimental effort. This approach recognizes the validity of the concept, acknowledges the limitations of our knowledge of what needs to be done in this area, and builds on successes as experience is gained.

Costs

Option A: \$30-40M in FY 1981 **Electrostatic Copy Made for Preservation Purposes**
 Option B: \$6-8M in FY 1981

Agency Positions

DOC, DPS, and OSTP favor Option A. Wexler concurs.
 OMB & CEA favor Option B.

DECISION

Option A. _____

Option B. _____

Supplement with Automation related R & D as proposed under existing legislation

2. Regulatory Compliance Technology Development

One of the major causes of the modification of industrial processes in recent years has been the obligation to assure compliance with environmental, health or safety regulation. Innovation is important in making these changes so that the new processes meet regulatory objectives at the least cost.

Federal investment in the development of compliance technology already is substantial. There are very large Federal expenditures, for example, on technologies for the clean burning of coal or to improve the safety of mines. But there are instances where further Federal intervention may be appropriate either to assure that needed technology is developed in instances in which the affected sector is unable to perform the work or to assure speedier compliance than the market can provide. In the course of its crosscut of regulatory activities in developing the FY 81 budget, OMB will closely examine the nature and extent of expenditures on compliance technology and will bolster our Federal effort where appropriate.

3. Improved Industry-University Cooperation in R&D

The scientific and technological strength of American universities has not been harnessed effectively in promoting industrial technological advance. In order to achieve this end, in FY 1978 the NSF established a program for the support of high quality R&D projects that are proposed jointly by industry-university research teams with cost sharing. The program has successfully improved the linkage between university and industry R&D capabilities, but requires strengthening.

-We recommend an obligation of \$20 M of new funds at NSF in FY 1981 for this purpose with subsequent year support at a similar level.

-We propose the extension of the NSF program to other agencies. NSF will work with DOD, DOE, EPA, and NASA in FY 1980 and with other agencies in subsequent years to initiate such university-industry cooperative R&D programs and to establish quality-control procedures as effective as the NSF peer review system. Each agency will formulate plans for building its support for this program with the objective of reaching an aggregate of \$150 M, and will report to OMB on its progress.

III. IMPROVING THE U.S. PATENT SYSTEM

Patents can serve several important functions in the innovation process. First, they provide an inventor with an incentive -- a monopoly limited in time. Second, the exclusive rights provided by a patent can stimulate a firm to make the often risky investment that is required to bring an invention to market. Finally, a patent provides an important method for disclosure of information about inventions and their uses to the public.

We have considered five areas of recommendations to better achieve these objectives. The first requires your decision.

A. Federal Patent Policy

This issue concerns the allocation of patent rights arising from Federal sponsorship of R&D.

Background: There is a strong argument that the general public should have an unrestricted right to use patents arising from Federal sponsorship. These patents were derived from public funds and all the public have an equitable claim to the fruits of their tax dollars. Moreover, exclusive rights establish a monopoly -- albeit one limited in time -- and this is an outcome not favored in our economy.

Several competing considerations, however, urge that exclusive rights to such patents should be available. First, government ownership with the offer of unrestricted public use has resulted in almost no commercial application of Federal inventions. Without exclusive rights, investors are unwilling to take the risk of developing a Federal invention and creating a market for it. Thus ironically free public right to use patent, results, in practical terms, in a denial of the opportunity to use the invention. Second, many contractors, particularly those with strong background patents and experience, are unwilling to undertake work leading to freely available patents because this policy would compromise their proprietary position. Thus, some of the most capable performers will not undertake the government work for which they are best suited.

As a result of the strength of these latter considerations, most agencies have the authority in some circumstances to provide exclusive rights. But because of the difficulty of balancing the competing considerations, this issue has been unsettled for over 30 years and the various agencies operate under different and contradictory statutory guidance. The uncertainty and lack of uniformity in policy has itself had its negative effect upon the commercialization of technologies developed with Federal support. As a result, there is an active interest in the Congress and among the agencies to establish a clear and consistent policy.

As a result of intensive discussion among the Departments and agencies, there is general agreement on the following issues:

- . The retention by the Federal government of a right to employ the invention for its own use;
- . Consistency and equity in the treatment of inventions made by government employees;
- . The active marketing by the agencies (or by the National Technical Information Service) of government-owned inventions at home and abroad;
- . The need to protect public rights in specialized areas, such as health, safety, or national defense;
- . The Government right to recapture control of a patent to which exclusive rights have been extended (so-called march-in rights) in order to promote commercialization, to protect the public interest, or to enforce antitrust laws; and
- . The retention of patent ownership by educational institutions or small businesses, in acknowledgement of their favored role and the importance of patents to them.*

The above would be features of any legislative proposal formulated by the Administration.

Alternative Strategies Concerning Assignments of Title

Several different strategies have been suggested:

Option A. Title in the Contractor. The performer of Government-sponsored R&D would be entitled to obtain title to patents arising from his work if he agrees to commercialize the invention.

Option B. Allocation According to Purpose. The option would provide some flexibility, allowing the allocation of title to be tailored to individual circumstances. However, the allocation of title between the Government and the contractor would be guided by the Government purpose in supporting the R&D. Where the principal purpose is to create or improve technology for use by the general public (as in DoT), title would, in the usual case, be retained by the Government. Where the primary purpose is to create or improve technology intended for use by the Government (as in DoD), title would ordinarily go to the contractor.

*Patents seldom arise in any event in the type of work typically performed by universities. Small businesses that develop patents under Government sponsorship are usually engaged in high-technology, high-risk activities where patent ownership is particularly important.

Option C. Exclusive Licenses in Field of Use. Title to the patent would be retained by the Government, but the contractor would obtain exclusive licenses in fields of use that he chooses to specify and in which he agrees to commercialize the invention. There would be an exception where the agency determines that such a license would be inconsistent with either the agency mission or the public interest. In most cases, the allocation would be after the invention has been identified, rather than at the time of contracting (as in Options A and B). The Government would license in all fields of use other than those claimed by the contractor.

Option D. Maintain the Status Quo.

Discussion

Development of a new legislative proposal that would presumably bring greater uniformity to Federal patent policy requires a delicate balancing of many competing considerations. Obviously, each of these factors is not of equal importance.

1. Uniformity. The agencies are currently governed either by an array of different statutes or, in the absence of statute, by Presidential guidance. Indeed, some agencies have different statutory guidance on patents governing different programs. This lack of uniformity does not reflect the tailoring of a consistent philosophy to different situations, but rather the changing views of Congress over time. In light of this fact, there is substantial confusion among contractors who perform R&D for several agencies or programs. Options A through C bring uniformity to the current disarray.

2. Impact on Innovation. Exclusive rights to a patent may be necessary to ensure that a firm will make the often risky investment that is required to bring an invention into production and to develop a market for it. Exclusive rights provide protection from other firms that might skim the profit from the market by copying the invention after the risk and cost of introduction is reduced by the first firm's efforts. Options A and C provide the strongest encouragement for innovation among the options because they allow the contractor to obtain full rights in areas of commercial interest to him. Selection between the two on this basis would hinge on the judgment whether the Government will be a more effective marketer in fields that are not of interest to the contractor (Option C), than the private firm (Option A).

3. Administrative Burden. Any policy that requires an agency to make decisions imposes some administrative costs. Option A imposes the least burden, Options B and C, somewhat more.

4. Uncertainty. Obviously, a clear and easy-to-apply rule is preferable to an ambiguous rule for the guidance it offers to both industry and Government officials. The automatic rule of Option A

provides the sharpest definition of rights. Some uncertainty surrounds Option C because, although the contractor would obtain exclusive rights, the allocation is not made until after the invention is identified and some vagueness will surround the definition of fields of use. One can expect considerable haggling and uncertainty to surround the complicated allocation system of Option B.

5. Disruption of Existing Agency Practice. The ease of applying a new strategy will turn, in part, on the extent to which the new approach differs from existing agency practice. As it happens, Option B results in a rule governing allocation of title that is similar to the existing statutory pattern of NASA and DOE. Both Options A and C would be a new approach for most agencies.

6. Contractor Participation in Government Programs. As noted above, firms with strong proprietary positions are unwilling to accept government contracts that would result in freely available patents. Option A provides stronger encouragement than Option C, although both protect contractor interests, because it gives the contractor complete patent ownership and because the allocation can be made at the time of contracting. Option B would encourage such firms to perform Federally-sponsored work intended for government use (e.g., defense), but not for the use of the public (e.g., energy).

7. Competition. Exclusive rights foreclose competition in the marketing of the invention covered by the patent and serve, in some cases, to enhance the recipient's market power. Option A, and in some instances Option B, have a more extensive adverse impact on competition than Option C, since the exclusive rights provided by Option C are limited to particular fields of use. It should be noted, however, that the government would retain march-in rights to recapture control of the patent in appropriate cases under all the options.

The differences among the options:

Option A. Title in the Contractor.

PRO:

- . Establishes the clearest and simplest rule of all the options.
- . Provides strong support for innovation, minimizes uncertainty and administrative burdens, and provides the strongest encouragement to contractor participation in Government programs.
- . Strongly supported by contracting firms.

CON:

- . This approach was introduced by Congressman Thornton in the 95th Congress and was strenuously opposed by Senators Long and Nelson, Admiral Rickover, and the Department of Justice. It is similar to the Schmitt-Stevenson-Cannon bill (S. 1215).
- . Can be viewed as a "give away" to industry, and hence is opposed by public interest groups.

Option B. Allocation According to Purpose.

PRO:

- . In cases where the Government purpose is to develop technology for its own use, the opportunity for exclusive rights will encourage innovation and contractor participation.
- . The flexibility of the option allows some tailoring of the allocation to the individual circumstances, but at the cost of substantial administrative burden and delay.
- . Authorizes a pattern of title allocation that is similar to the existing agency policy.

CON:

- . In cases where the Government purpose is to encourage general public use, the necessary exclusive rights may not be available.
- . Creates the anomaly that a patent for the same invention could be allocated differently, depending on the Government's intent in supporting the work.
- . Will be opposed by part of the large-contractor industry.

Option C. Exclusive License in Field of Use.

PRO:

- . Encourages commercialization of innovation with the minimum necessary allocation of exclusive rights.
- . Offers advantages over Option B in terms of minimizing administrative burdens, and encouraging contractor participation, although not as strong as Option A in these respects.
- . Inventors and inventions would receive uniform treatment, regardless of the contracting agency.

CON:

- . This option is a new proposal and therefore it has not yet been developed in the detail of the other options.
- . Will be viewed as less desirable than Option A by large industry and less desirable than Option B by the large defense contractors.

Option D. Maintain the Status Quo.

Considered not a real option in light of legislation pending in Congress.

Agency Positions:

The agencies each have a range of preferences. Option A is the first choice of OMB, USDA, HUD, DOE, NSF, NASA, GSA, and NRC and is the second choice of DoD and DoC. Because this option provides the maximum leverage for innovation, it would be the first choice of OSTP if the perception of undue favoritism of industry were less strong. It is unacceptable to DoJ, HEW, and DoT, chiefly because these agencies believe there are situations in which the contractor should not be allowed to obtain title.

Option B is the first choice of no agency. It is, however, acceptable to DoJ, and is the second choice of DoE, NASA, GSA and OMB. It is unacceptable to HEW for the reason given above.

and Wexler

Option C is the favored option of DPS, OSTP, DoJ, DoC, DoI, and EPA. / It is unacceptable to DoD, DoE, NASA and OMB because they believe that allocating rights by field of use will be arduous and time consuming. There apparently is little Federal experience in licensing by field of use, although this is a practice in the private sector.

Option D is favored by DoD, HEW, and DoT, and is the second choice of HUD and NSF. It is unacceptable to DoC, DoI, and EPA because of the need to resolve the nagging confusion of the existing statutory system.

Your Decision:

Option A _____ Option B _____ Option C Option D _____

B. Increasing Presumptive Validity and Reducing Litigation.

The achievement of the objectives of the patent system depends in large part on the strength of protection a patent provides. Today, however, a U.S. patent has less than a 50% chance of surviving a court challenge. Uncertainty as to the validity and continued reliability of a U.S. patent creates the threat of lengthy and expensive litigation with an uncertain outcome.

This fact is particularly significant to small firms. Although large companies can often forego patent protection by relying on trade secrets, or by rapidly raising investment capital and quickly penetrating markets by means of large advertising budgets and extensive distribution systems, a small firm's patent may be the sole asset against which investment capital can be raised, as well as its only protection against encroachment by others.

In order to improve the presumptive validity of an issued patent, to reduce the cost and frequency of defending it in court, and to encourage individual inventors, we propose the following:

1. The completeness of the files available to search for prior art, the appropriateness of their classification, and the ease with which information can be retrieved from them are direct contributors to the Patent and Trademark Office's (PTO) ability to issue valid patents. Thus the PTO will:
 - . Institute an inventory control and maintenance system to ensure the integrity of the patent examiner files and the public search room files.
 - . Gather all non-duplicated foreign patents, catalog them together with the U.S. patent files, and include them in the inventory control and maintenance program.
 - . Establish the reclassification program at a level to ensure currency of classification headings, and establish the definitions on an automated data base.
 - . Conduct a regular program for examiners in the use of the classification system as updated.
2. Regardless of the excellence of an initial search, challenges based on alleged prior art or lack of novelty will be made by those who wish to copy. This Administration's action in recommending to Congress the establishment of a single appeals court to deal with patent appeals was an important step towards improving the litigation phase of patent challenges.

To achieve a significant reduction in the cost and uncertainty of litigating patent validity in the courts, legislation will be submitted to provide for voluntary re-examination of issued patents by the Patent and Trademark Office at the request of any person or the court. Any and all bases for contesting validity will be considered in re-examination. The legislation will provide for staged implementation: only literature and patents will be considered as bases for contest originally, with discretion in the Secretary of Commerce to broaden the base as PTO experience accumulates.

C. Patent Information

One of the world's greatest stores of technical information may be in the PTO files, which include more than four million U.S. Patents. However, the current state of access to the information in those files renders their technical content virtually useless for anyone but patent examiners. Three actions will be undertaken to provide for greater public use and benefit from the U.S. patent files as a technological information resource:

- . Legislation will be submitted to require submission of a cover sheet with each patent application, giving information about the contents of the patent, its potential use, and appropriate key words for indexing.
- . The Commissioner, U.S. Patent and Trademark Office, and the Secretary of Defense will be directed to conduct a joint experiment on the Defense Advanced Research Projects Agency (DARPA) network, permitting full-text retrieval of patents in a limited set of areas for engineering use. The results will determine the feasibility of establishing such a system to improve use of the patent information.
- . We will explore further dissemination of patent information through libraries and private sector information systems by expanding the number of libraries that have microfilm patent files and by providing tapes to the private sector. The cost to users will be the reproduction cost plus a sufficient markup to permit the purchase by the PTO of other information.

The costs for this program, approximately \$1.8 M in FY-1981, will be more than offset by the adoption of the user-fee system described below:

D. Reapportionment of Cost

The primary value of a valid patent is to the patent holder or assignee. Despite this fact, more than two thirds of the cost of running the PTO is borne by the general public. This separation of value received and price paid has led to chronic underfunding of the PTO and continued degradation of its services. This deterioration has taken place despite the willingness of industry to bear a far larger share of those costs.

In order to rectify that situation, we will submit legislation to establish a PTO revolving fund fed by a cost recovery system with the following characteristics:

- . Minimize initial fees so as not to unduly burden the small firm or individual inventor at the time of filing, or during the early life of the patent when risks and development costs are highest;
- . Establish maintenance fees that spread a substantial portion of the cost among those whose patents have a growing value over the years;
- . All other costs of the PTO (e.g., the proposed patent re-examination system) would be borne through a full-fee recovery system, as such additional services are solely for the protection of the asset value of the patent.

Implementation will result in an eventual \$60 million reduction in the Federal funds needed to run the PTO.

E. The Small Inventor

Even with a strengthened patent system, the individual inventor is at a significant disadvantage. As an indication of your concern for the individual inventor and his role, we suggest:

- . The Administrator, Small Business Administration, establish an Office of Small Business Patent Counsel to assist inventors in the transition from invention to small business by providing the ancillary business that attorneys rarely provide. To encourage the development of technologically based minority businesses, a similar office will be established in the Office of Minority Business Enterprise and its activities will be coordinated with the SBA. All costs will be met by reprogramming.

IV. CLARIFYING ANTITRUST POLICY

The vigorous enforcement of antitrust laws spurs competition and the pressure of competition can be a stimulant to the development of innovations that provide a competitive edge. However, it is argued that the antitrust laws discourage some companies from being too successful, and the laws are often and mistakenly understood to prevent cooperative activity, even in circumstances in which cooperation fosters innovation without undue harm to competition.

We found that there was much misunderstanding in industry, in the universities, and in the government as to those instances where cooperation in research might be permissible or where such cooperation within an industrial sector or between government and industry should be avoided. As you know, industry tends to underinvest in longer-term basic research, largely because pay-back is difficult to achieve in less than a decade. In long-term research particularly, some industry cooperation seems desirable. It was this premise that led to the cooperative automotive research program, which was announced after your meeting with the auto industry executives last May.

We agree on two actions:

- . In order to clarify its policy and possibly spur greater research activity by industry, the Department of Justice is preparing a statement that will clarify its position on collaboration among firms in research and development. We believe this action will be of considerable importance in setting a tone concerning the Administration's policy in antitrust matters where R&D is at issue.
- . To address the perception that antitrust policy inhibits innovation and to improve communication between industry on the one hand and the Justice Department and FTC on the other, Justice, the FTC, and Commerce will initiate a dialogue with industry about innovation, antitrust policy formulation, and enforcement. The dialogue will include wide dissemination of the FTC and Antitrust Division's existing opinions on innovation-related projects.

V. FOSTERING THE DEVELOPMENT OF SMALLER INNOVATIVE FIRMS

Having enhanced the availability of relevant technical knowledge in Section II and dealt with its ownership in Section III, we need the capability to convert invention into innovation -- the task of the entrepreneur.

Small firms are often unable to make the transition to large scale production that successful innovation frequently requires. Large firms, on the other hand, can rarely undertake the kind of innovation in which small firms engage and often rely upon the acquisition of innovative small firms for the introduction of significant changes. Such acquisitions benefit both parties and the possibility provides a significant incentive to the entrepreneur in the small firm. Actions to improve the rate of start-up and growth of small technology-based firms are supported, therefore, by both small and big business.

In recent years, the major problems facing entrepreneurs in new firms have been: start-up capital, second-round financing, and early management assistance. The new capital-gains structure seems to have loosened the flow of second-round venture capital from private sector sources.

Many of the proposals already discussed in this memorandum will encourage smaller R&D firms and businesses. To provide further focus for smaller innovative firms and to prepare for the White House Conference on Small Business, we have four recommendations:

A. NSF Program Extension

As a major tool for providing very early funding, we propose an extension of the NSF Small Business Innovation Research Program. That program provides funding to small companies to permit (a) development of a venture analysis for a new project; and (b) substantial demonstration of technological feasibility. The program has operated for two years, is applauded by the small and big business communities, and has resulted in a number of projects for which follow-on private-sector funding has been pledged.

We recommend that the NSF program be expanded through an increase in FY 81 by \$10 M and NSF be directed to aid other agencies.

- . All mission agencies which have assistance authority and sponsor science and technology-based R&D as a part of their research and development programs will develop analogous programs. OMB will coordinate the development of plans and agency specific goals for the phased expansion of those programs, working towards a goal of approximately \$150 million annual funding.

B. State and Regional Involvement. In order to help alleviate some of the difficulty an entrepreneur confronts in obtaining start-up capital, we believe you should call on the states or multi-state regions to join you in the federal government's efforts to spur innovation. We would ask them to establish state or regional Corporations for Innovation Development. These CID's would be modeled in part on the successful National Research and Development Corporation in Great Britain and on existing state corporations, such as the Connecticut Product Development Corporation. Their functions would include:

- . Providing direct equity funding of the start-up of firms that wish to develop and bring to market a promising, but high risk, innovation.
- . Providing guidance and advice to potential applicants to the program described in A above, and serving as the necessary second-round guarantor in appropriate cases.
- . Providing early management assistance to firms that are funded.
- . When otherwise qualified, acting as the recipient of Economic Development Assistance funds for the state or region.

In order to lead the way for the states or regions in establishing the corporations, we suggest that the Federal Government (through DOC) support two regional CID's in FY 1981. In order to provide some breadth of experience, one of these CID's would be in an industrial region and the other in a semi-rural area. The Federal support would be by way of loans of \$4 M/center, on condition that the region provide matching funds.

C. Federal R&D Support

Ongoing funding for new R&D is always a problem for small firms. It is a particular problem given the much higher yield of innovation per R&D dollar in small firms compared to large firms. The small business community believes that given their number, and the significance of their role in the innovation process, they receive a disproportionately low percentage of the Federal R&D dollars.

To deal with this problem, each agency contracting for R&D services will:

- . Develop policies that ensure small business will not be unfairly excluded from competition for contracts.
- . Publicize through the SBA and the state or regional CID's above, opportunities for bidding that are especially appropriate to small businesses.

- Report annually to the OMB their progress toward increasing small business participation.

D. General Venture Capital Availability

As the number of new start-ups increases, they can be expected to increase the demand for second-round financing. While the capital gains tax changes have increased the flow from taxable private sector investors, the flow will be further encouraged by the following:

- Under your Administration the ERISA prudent-man rule has been modified to increase the availability of capital from pension funds to innovative small firms.
- To increase the current availability of venture capital, the Administrator of the Small Business Administration will be directed to change Part 121.302(a) of the SBA regulations to permit Small Business Investment Companies (SBIC's) and private sector venture capital firms (such as Allstate Insurance, etc.) to co-invest in a small firm provided:
 - (1) there is an identifiable independent entrepreneur in control of the firms; and,
 - (2) there is no provision for acquisition by the private sector firm as part of its financing.
- The availability of venture capital will be further fostered by establishment of an interagency committee, chaired by the Administrators of ERISA and the SBA, that will be directed to examine what regulatory changes or other means are required to stimulate investment in small and medium-sized technology-based firms by non-taxable pension and endowment funds.
- We will commit ourselves to monitoring further the availability of venture capital and to take additional actions should the problem re-emerge.

VI. FEDERAL PROCUREMENT AND REGULATION

A. General Procurement

Market pull is at least as significant as technology push as a motivator of industrial innovation. Because DOD and NASA have historically shown the impact that Federal purchasing power can have as a market-pull stimulus, it now seems reasonable to extend that experience to Federal purchasing in general.

- o The Administrator for Federal Procurement Policy in the Office of Management and Budget will be directed to give priority attention to effecting reforms in Federal procurement practices. Simple and uniform procurement policies and regulations will remove barriers which inhibit the government from realizing benefits from industrial innovation. Special Attention will be given to innovative small and minority businesses in Federal procurement. Heads of Executive agencies and establishments will be directed to designate senior officials to expedite implementation of promulgated reforms. Special attention will be paid to substituting performance specifications for design specifications and, wherever feasible, selection will be on the basis of costs over the life of the item, rather than merely the initial purchase price.
- o The Administrator, General Services Administration, will be directed to accelerate and expand the New Item Introductory Schedule and to publicize new items within the Federal government. To accomplish this, GSA will take steps to inform the business community, particularly small businesses, of the New Item Introductory Schedule and of its benefits.

B. Regulation

The Federal regulatory process both encourages and discourages industrial innovation. In the spirit of this report, we examined those areas where changes in Federal action can increase the net encouragement. We do not address the content of regulations -- rather the way in which they are promulgated and administered.

In environmental, health, and safety regulations, design standards that state exactly how a goal shall be reached can severely discourage innovation. Specifying the required goal -- for example, through performance standards -- promotes innovative solutions, provided sufficient time exists for the pursuit of those solutions. Because EPA has been a leader within the Federal government in adopting innovative regulatory techniques, and because EPA regulations

have a pervasive potential impact on industrial innovation rates, we propose that:

- o The Administrator of EPA will review the agency's programs to determine what further opportunities exist to substitute performance standards for design or specification standards within statutory authority. Specification standards should only be used when they are clearly justified. Regulatory agencies should also be encouraged to explore the possibility of providing dual criteria for either performance and specification standards, thereby allowing individual firms to choose the mode best suited for them.

Time to develop technology to secure the regulatory benefits at lower cost is a necessity if we are to improve our compliance productivity. If a performance requirement is based on the best currently available technology and the time available for compliance is short, industry can only comply by using the structure embodied in current technology; the proper incentive is there, but the time is not. The public cannot, therefore, benefit from the development of least-cost technology. Time is an essential ingredient of the innovation process. By unduly constricting time, the range of technological options which can be explored is constrained, existing technology is purchased, and lower cost alternatives are not explored and developed.

To secure that needed time, we propose that:

- o In conjunction with their semiannual regulatory agenda, executive health, safety, and environmental regulatory agencies prepare five-year forecast of their priorities and concerns. Better knowledge of agency plans will allow industry to plan its research and development.
- o Under your direction, the EPA Administrator will develop and publicize a clear implementation policy and set of criteria for the award of "innovation waivers" and will assess the need for further statutory authority.
- o At an appropriate time in the context of rulemaking proceedings we will call particular attention to EPA's recent announcement of the bubble concept. In addition, EPA will be directed to explore, at the appropriate time, the possibility of extending the bubble concept to encompass groups of plants, such as exist in industrial parks. Under such an extension, states would then be allowed to maintain a "Market" for pollution products among the firms in that industrial park as long as the bubble maxima were not exceeded.

Product safety and efficacy regulations affect innovation differently. The longer the time that it takes -- or is expected to take -- for new product certification, the lower the projected payback from the innovative product and the lower the likelihood that a firm will invest in that product innovation. Thus, we propose the following:

- o Federal executive agencies responsible for reviewing the safety and efficacy of products should develop and implement a system of priorities. Under these systems, the agencies will identify those products that are most innovative and/or have exceptional social benefits, and expedite their clearance reviews to the extent permitted by applicable statutes. These systems will affect the speed, but not the quality, of the agency's review.
- o To expedite the introduction into the U.S. of new drugs marketed in foreign countries and to expedite the U.S. drug review process, the Administrator of the Food and Drug Administration will be directed to:
 - Seek to develop formal agreements with FDA's foreign counterparts to exchange data on new drug safety and efficacy.
 - Seek to develop international standards for test and laboratory standards for new drug safety and efficacy.
 - Determine the feasibility of a program which will certify institutions complying with designation standards for early stage human drug research in some therapeutic categories.

The foregoing recommendations will be presented against the backdrop of your substantial commitment to deregulation and other initiatives such as the elimination of unnecessary regulations, the Regulatory Council and its regulatory calendar, and the Regulatory Analysis Review Group.

VII. LABOR AND INNOVATION

Opposition by labor can delay or even prevent the introduction of an innovation. Even the perception or misperception by investors of the attitudes of labor toward innovation can affect their willingness to move ahead. Labor's potential effect on the innovation process thus can be profound. Delays have been encountered in introducing new technologies into industries such as publishing and shipping.

Innovations that improve productivity commonly increase the number of workers employed within an industry over the long term. This point was demonstrated by Salter, a British economist, whose study of 28 industries showed that for each 10% increase in productivity, there was a 6% increase in employment in that industry. The increase in employment was found to result from expansion of output due to decreased costs of production and the growth of demand for the products at the lowered price. However, individual innovations are often perceived to threaten labor by shifting the skill mix required.

Action will be taken to develop a Labor-Technology Forecasting System cooperatively with labor and management. This system will form an adjunct to the government's various adjustment assistance, impacted industry, and unemployment programs. Its purpose is to forecast technological change within specific industries and to assess the implications of such change for labor. These forecasts and assessments will provide the basis for plans to accomplish labor retraining and other adjustment activities with industry and labor. They will be developed sufficiently in advance of the technological change so as to provide a secure transition for the workers. The key to successful adjustment is warning time.

Labor has been advocating this approach for twenty years, but only recently has the forecasting capability come into existence. As a result, this action seems now both technically feasible as well as important. Therefore:

- The Secretary of Labor and the Secretary of Commerce will work jointly and together with labor and management to develop a Labor/Technology Forecasting System (LTFS); and to implement that system in the context of ongoing labor-management activities, in conjunction with agencies responsible for adjustment assistance, and in cooperation with labor/management teams.

VIII. OTHER RECOMMENDATIONS

One of the most useful activities you can undertake to enhance innovation is to set a course that indicates a continuing commitment to improving it. Many of the above recommendations will signal this intent to the private sector. There are four final recommendations that will help display your intention:

- . Because enhancing industrial innovation lies primarily in the management/engineering area, the Commerce Department and NSF will host a National Conference for Deans of Business and Engineering schools to stimulate improved curriculum development in the areas of technology management and entrepreneurship.
- . The Department of Commerce will incorporate into the World Information Trade System (WITS) information which will better enable U.S. firms to design and develop products for sale overseas. This will be done in concert with your recent decision to reorganize the trade function within Commerce.
- . With your concurrence, we will establish a presidential award for technological innovation. The existence of these awards will provide direct and explicit encouragement to U.S. industry on the part of the Executive Branch. Non-monetary awards consisting of a presidential scroll or plaque will be made to companies in six areas: transportation, communication, health, agriculture and food, natural resources (including energy) and others. The criteria for selection of outstanding innovations will include both technical excellence and commercial impact. The Department of Commerce will be delegated the responsibility for presenting the President with a proposed list of nominees each year. The awards would be made on your behalf by your Science and Technology Advisor.
- . A committee will be formed by the National Productivity Council and charged with the tasks of monitoring innovation, developing policies to encourage it, assisting the agencies in implementing these policies, and pursuing the removal of legislative or administrative barriers to the innovation process.

APPENDIX I

TAXES

As might be expected, many tax-relief proposals were examined in the course of this study. Most, such as accelerated depreciation and other measures to enhance capital formation would have some effect on industrial innovation but can be justified only by much larger considerations. These measures were supported by large American companies.

Several tax proposals, however, would have an impact on technological innovation if properly targeted. These would involve less budgetary cost and are generally supported by smaller firms.

The following tax incentives would enhance the development and growth of small technology based firms:

- . To encourage reinvestment in such firms and to bias the flow of capital into such firms, permit the tax on capital gains realized from any source to be deferred if those gains are reinvested in such targeted firms.
- . To encourage private investment in new start-ups of such firms, extend the tax loss carry-forward period from seven to ten years and increase the number of investors allowed in a Subchapter S corporation to 50.
- . To encourage such firms to invest in appropriate equipment in the early years before they show a profit, make their tax credits refundable rather than limited to a reduction of tax liability.

To make the tax incentives effective in achieving their intended goal of stimulating technological innovation in small and medium-sized firms, without providing a windfall for the myriad of such firms not engaged in innovation, some form of certification of the target companies is required. Commerce has developed a set of criteria for such certification which would target small technology-based firms. Treasury opposes such a program because of the difficulties of certificatory procedures and the effects on the tax structure.

A significant opportunity also exists to use the tax mechanism to encourage increasing industrial support to R&D at minimum cost in all firms regardless of size:

- . Provide a tax credit for the increase in R&D expenditures in a given year over the R&D expenditures of the firm averaged over the preceding three years.

Many of these proposals have been forwarded to the EPG and should be given consideration if and when your Administration forwards a tax proposal to the Congress.

APPENDIX II

THE ANALYTICAL FRAMEWORK

The recommendations in this report are based on a detailed understanding of the industrial innovation process. The best existing model of that process is an investment model that can be summarized as follows:

- o Innovation takes place at the level of the firm and occurs when a decision-maker faced with an opportunity, determines that a greater reward is likely to be gained from investing in a specific new product or process -- an industrial innovation -- than in the next best available investment. Federal actions affect innovation within the firm to the degree to which they affect the ability of the firm to innovate or the decision calculus of its executives.
- o For the purpose of this study, the process of industrial innovation was modeled as shown in the diagram.
- o Decision points 1 and 2 are made by executives internal to the innovating firm and constitute decisions to expend resources of the firm based upon an assessment of the probability of success of the venture and an estimate of the likely return on that investment. Decision point 3 exists external to the innovating firm. It is a decision made by a buyer who must decide whether or not to purchase and use the new product or process.
- o Decision point 4 also occurs outside the innovating firm and represents the decision of outsiders to provide financial, managerial, or technical resources essential to the success of the innovation process. Large firms can often supply such resources internally; small firms usually must seek external sources to start up and grow.
- o From this model we see that five types of resources are required for innovation to take place:
 - o market information
 - o technical information
 - o time
 - o capital
 - o and managerial/technical talent.

The lack, or inadequacy, of any one of these may either prevent innovation from taking place, or restrict innovation to a less desirable path. Therefore, any Federal action which supplied a missing resource can make otherwise impossible innovation, possible.

- o The likelihood that a decision-maker will invest in an innovation rather than in the acquisition of a proven asset such as timberlands, department stores, or circuses depends primarily on the ratio of the estimated current value of an investment in innovation to the current value of the next best available opportunity for investment. This ratio R can be expressed for investments of like size, as an equation:

$$(1 - p_f) \sum_{i=s}^{i=F} P_i / (1+D)^i$$

$$R = \frac{\quad}{I}$$

where:

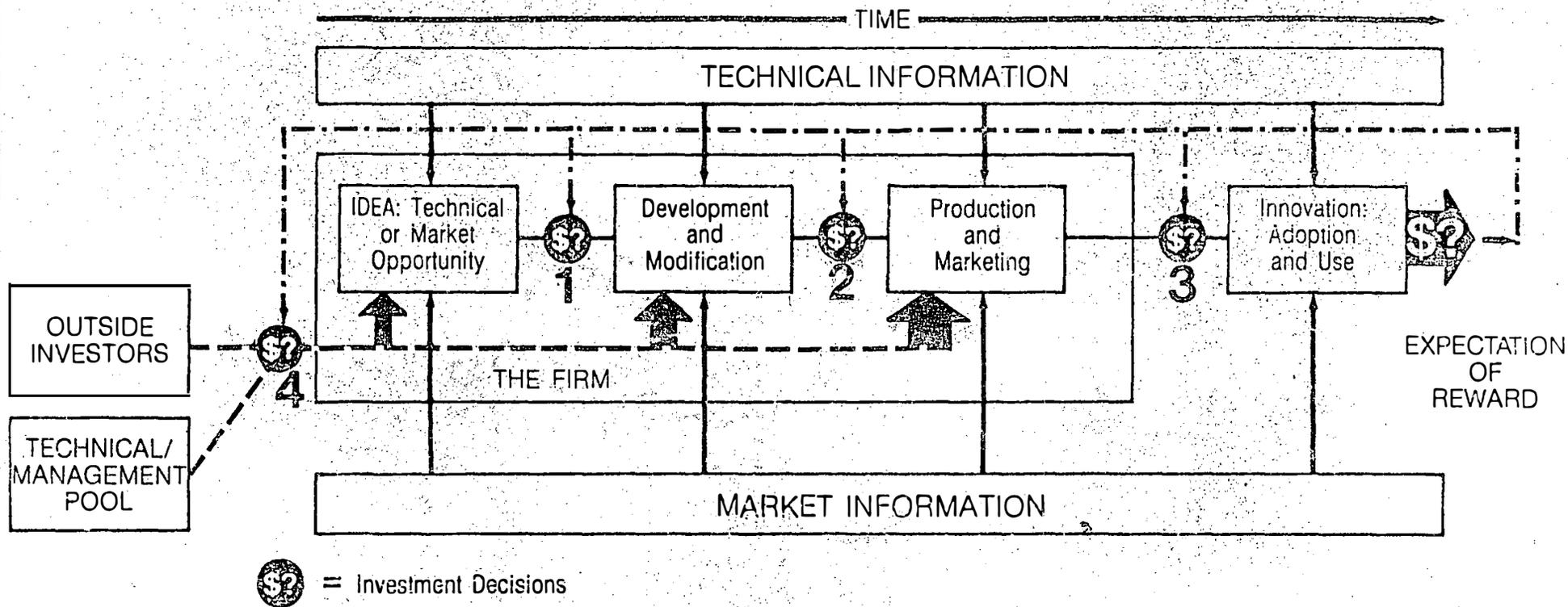
- p_f = The estimated probability that the project will fail
- P_i = Estimated income from the project in year i
- s = Year that income starts
- F = Year that income finishes
- I = Size of the required investment, and
- D = Rate of return expected from the next best investment.

- o From this equation it is apparent that any Federal action that decreases the estimated probability that the project will fail (p_f), the size of the required investment (I), or the time span until the income begins (s), will increase the likelihood of innovation. Similarly, innovation will be increased by Federal actions that increase the estimated income from the project (P_i) or the length of time associated with the income stream (F).

Available resources determine whether the innovation process can take place; decision within firms determine whether it will take place. The Federal Government can make innovation possible by acting to improve the supply of resources, and its occurrence more probably by affecting one or more of the factors that influence the outcome of this decision.

THE INNOVATION PROCESS

(A Simplified Decision Model)





UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Science and Technology
Washington, D.C. 20230
(202) 377-3111

October 19, 1979

Dear Stu:

For over a year now, I have tried to manage the Domestic Policy Review of Industrial Innovation objectively and dispassionately. Although I've spent the past 30 years engaged in innovation -- and the last 10 in studying the subject -- I've tried to keep my personal views out of the interagency process that the DPR represents. Now that the job is over, however, I want to put on my other hat as a supporter of the President and as an advisor who knows this field and the public's reaction to it.

The DPR has represented, from the beginning, a political opportunity.

- o The 150 industrial and public individuals who participated in formulating the report in Appendix 3, and the additional hundreds who reviewed it and participated in the seven all-day public seminars in the Commerce Department's auditorium, represent an important constituency of chief executive officers, labor leaders and academics who will support our moves to encourage industrial innovation. Aside from the tax issues, we have successfully dealt with over three-fourths of the innovation-related issues they raised.
- o In the 40 or 50 speeches I've given on the subject -- all over the country -- it is clear that the public in general also believes that a resurgence of our technological and industrial capability is possible and can be brought about by Federal action and leadership. Polls and my own experience show that the public views innovative industrial development not only as an attack on inflation and a way of creating jobs, but as THE way to win the competitive race we are in with the other industrialized countries.
- o Unlike our traditional macroeconomic moves and our essential conservation moves, industrial development through technological improvement doesn't require giving anything up, and hence seems to have no negative implications for the public. Even public spending in this area is recognized as investment as opposed to unproductive expenditures.

There are two decision items in the memorandum, and I'd like to comment on them.

Cooperative Development of Generic Technology basically sets the tone of a cooperative government/industry effort to enhance our industrial development through innovation. The program, in its 1979 study phase at Commerce, uncovered real support among large and small companies and a wide range of other constituencies. Clearly I favor Option A although I have a great concern even about it. It doesn't get anything 'real' started until October 1980. It could be made to have significantly more impact during the primary election period. We have enough proposals and enthusiasm from industry so that I believe Commerce could get as many as eight of these centers started -- in states of our choosing -- in the spring and summer of 1980, in addition to announcing 1981 selections. To do so would require a 1980 supplemental of \$13 million. OMB, quite naturally, is opposed to any supplementals, but an early start in 1980 with real centers will have a lot more political impact than just some announcements. The cost is low, and I'd like to see the President come out with an immediate action program. We've studied this for a year now.

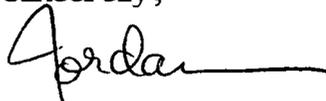
The Uniform Patent Policy options give the President a chance to accomplish something that his predecessors have been unable to do in 30 years. While many of the agencies favor Option A, I would prefer the President do nothing rather than make that choice. The opposition in the Senate is both strong and vituperous -- particularly in the small business subcommittees and from Senator Long. The problems with Option B are summed up in the 'con' statements. In my opinion, Option C is preferable to both A and B. Contractors can get what they need via automatic exclusive licenses (which even for tax purposes are the equivalent of title) or from precontract waivers, and the government can get significant commercialization across industries through its central licensing activity.

We have developed the four tax proposals in Appendix I in some detail, and I'd strongly recommend that they be included in any tax message that the President sends up.

Stu, I'm truly delighted for the President's sake with the way this has turned out. There is strong enthusiasm among industry, labor, trade groups, and the Congress for us to devote serious government attention to improving the supply side of the economic equation. The President's message on industrial innovation will be a significant step in that direction.

As the year goes on, I'd be happy to help formulate other actions for other messages that will allow him to continue this thrust.

Sincerely,



Jordan J. Baruch

THE WHITE HOUSE

WASHINGTON

MEMORANDUM FOR THE PRESIDENT

FROM:

ANNE WEXLER *Anne*

SUBJECT:

Eizenstat Memo Re Industrial Innovation

From the viewpoint of the constituencies involved, I concur with Stu that a larger number of centers for the Cooperative Development of Generic Technologies (option A) will demonstrate your seriousness to small business. I also agree with Stu that Exclusive Licenses in Field of Use (Option C) is the best resolution of the problem of allocation of patent rights arising from federally sponsored research and development. It still allows use by the business developing the invention, but it allows others to use the patent right in other fields. It also avoids the problem of "give aways" to big business.

As you know industrial innovation is an important issue to all segments of the business community. Jordan Baruch has involved many of America's best minds in developing this domestic policy review. I would strongly recommend that you acknowledge their contribution and the significance of this initiative by announcing your innovation policy decisions in the East Room.

ID 794632

THE WHITE HOUSE

WASHINGTON

DATE: 23 OCT 79

FOR ACTION: AL MCDONALD

JACK WATSON

FRANK MOORE

ANNE WEXLER

nc attached

INFO ONLY: THE VICE PRESIDENT

HEDLEY DONOVAN

SUBJECT: EIZENSTAT MEMO RE INDUSTRIAL INNOVATION DPR

+++++

+ RESPONSE DUE TO RICK HUTCHESON STAFF SECRETARY (456-7052) +

+ BY: +

+++++

ACTION REQUESTED: IMMEDIATE TURNAROUND

STAFF RESPONSE: () I CONCUR. () NO COMMENT. () HOLD.

PLEASE NOTE OTHER COMMENTS BELOW:

ID 794632

THE WHITE HOUSE
WASHINGTON

DATE: 23 OCT 79

FOR ACTION: AL MCDONALD
JACK WATSON

FRANK MOORE
ANNE WEXLER

nc attached

INFO ONLY: THE VICE PRESIDENT

HEDLEY DONOVAN

SUBJECT: EIZENSTAT MEMO RE INDUSTRIAL INNOVATION DPR

201 10/27

```

+++++
+ RESPONSE DJE TO RICK HUTCHESON STAFF SECRETARY (456-7052) +
+ BY: +
+++++

```

ACTION REQUESTED: IMMEDIATE TURNAROUND

STAFF RESPONSE: () I CONCUR. () NO COMMENT. () HOLD.

PLEASE NOTE OTHER COMMENTS BELOW:

ID 794632

T H E W H I T E H O U S E

WASHINGTON

DATE: 23 OCT 79

FOR ACTION: AL MCDONALD

FRANK MOORE

JACK WATSON

ANNE WEXLER

INFO ONLY:

SUBJECT: EIZENSTAT MEMO RE INDUSTRIAL INNOVATION DPR

+++++
+ RESPONSE DUE TO RICK HUTCHESON STAFF SECRETARY (456-7052) +
+ BY: +
+++++

ACTION REQUESTED: IMMEDIATE TURNAROUND

STAFF RESPONSE: () I CONCUR. () NO COMMENT. () HOLD.

PLEASE NOTE OTHER COMMENTS BELOW:

THE WHITE HOUSE
WASHINGTON

file

MEMORANDUM FOR THE PRESIDENT

FROM: ANNE WEXLER *Anne*

SUBJECT: Eizenstat Memo Re Industrial Innovation

From the viewpoint of the constituencies involved, I concur with Stu that a larger number of centers for the Cooperative Development of Generic Technologies (option A) will demonstrate your seriousness to small business. I also agree with Stu that Exclusive Licenses in Field of Use (Option C) is the best resolution of the problem of allocation of patent rights arising from federally sponsored research and development. It still allows use by the business developing the invention, but it allows others to use the patent right in other fields. It also avoids the problem of "give aways" to big business.

As you know industrial innovation is an important issue to all segments of the business community. Jordan Baruch has involved many of America's best minds in developing this domestic policy review. I would strongly recommend that you acknowledge their contribution and the significance of this initiative by announcing your innovation policy decisions in the East Room.

*Phil
comment?*

No way —

No time —

No Priority —