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file - Art Fletcher

BRIEFING BOOK
FOR
THE EFFORT TO INCREASE
MINORITY ENGINEERING GRADUATES

CONTENTS

Historical Summary 1972 - 73 .

- I The Effort to Increase Minority
 Engineering Graduates

 Definition and Goals
 Why This Effort is Important
 Breadth of Effort
 (with specific examples)
- II A General Proposal for National Council
- III Listing of Background Discussions
 With Federal Government Officials
- IV Why the Administration Should Be
 Enthusiastic About Endorsing This Effort

Program Summary - 1974

- V News Letter - National Academy of
 Engineering
- VI Expo Tech - Quincy
- VII Media

EXECUTIVE SUMMARY

I. Problem-Opportunity

There is great social and economic pressure and need to increase participation by minorities in key professional and leadership positions in American industry. Industry has made great progress in hiring minorities into entry level positions and is attempting to help them qualify for higher level assignments. Realistically, however, it must be recognized that a high percentage of managerial positions in modern industry requires formal engineering education: 60% of the managers in technically-oriented industry are engineers, but out of 43,000 engineers graduating annually in the U.S., less than 1% are black and a few additional are other minorities or women, despite the fact that minorities account for 12% of the total population. The fastest, surest way to increase the movement of minorities into industrial leadership ranks is to increase the number of minority engineering graduates.

II. Proposed Program

The proposed program is aimed at achieving a 10-15 fold increase in minority engineering graduates by the mid-1980's (moving from 400 per year at present to 4000-6000 per year). The short-range goal is to increase freshmen engineering enrollment of minorities by 50% in the fall of 1973, 100% in 1974, and 200% in 1975.

The program requires long-term national effort involving all sectors of society: elementary and secondary education, engineering education, employers, government, minority groups, technical and professional societies, and foundations. Each of these sectors must take action to overcome the cultural, financial, academic, and motivational challenges for minority entrance into engineering and business management. These challenges are formidable, but solvable through coordinated action by all the sectors involved.



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THE EFFORT TO INCREASE MINORITY ENGINEERING GRADUATES

Definition

The effort to increase minority engineering graduates is aimed at achieving a 10-15 fold increase (400 to 4000-6000 annually) in minority engineering graduates by the mid-1980's. The short-range effort is focused on increasing freshman minority engineering enrollments by 50% in Fall, 1973; 100% in 1974; and by 200% in 1975.

These goals are in addition to prior, current and future efforts supporting financially and otherwise specific minority programs at the secondary and college levels; recruiting vigorously minority employees for the professional and managerial work force; seeking and encouraging minority employees in upward mobility from hourly to salaried jobs; and providing a wide range of educational opportunities.

Achievement of these goals will be a step toward integrating the management of America's mainstream of business--the industrial sector. The effort has grown from the realization that, whereas 18% of the population are minority and 60% of the USA's industrial sector management have 4-year or higher engineering degrees, less than 1% of the engineering graduates are black and only a handful were other minorities or women. The sparse number of minority managers and professionals is due to the scarce supply of minorities having the education to compete effectively for professional and managerial jobs in American industry. Without increasing the supply of minority engineering graduates dramatically, progress towards integration of industrial management will proceed at only a snail's pace!!

Why This Effort Is Important

The rationale for initiating this effort can be categorized as follows:

moral reasons compel fair Americans to want to do more than has already been done in making progress towards integration: so far progress has been achieved primarily in the low echelons of the work force;

business opportunities in the form of new and expanded markets develop as minorities earn more wages and spend more for goods, services and taxes; government spends less on welfare and related support;



human resources hitherto undeveloped become available to participate in more responsible and satisfying jobs in American business and to partially fill a projected engineering shortage for 1976-1980 and beyond;

social and political forces will focus constructively on ways to fulfill genuine needs rather than breed discontent in a seething atmosphere of unrealistic expectations.

Breadth and Status of the Effort

To increase the minority engineering graduates requires a national effort involving all sectors of American society: elementary and secondary education, engineering education, employers, government, minority community, technical and professional societies, and foundations. It is conceived as a long-duration program that demands new and creative approaches not simply "business-as-usual" or even "more-of-the-same." The cultural, financial, academic and motivational challenges for minority entrance into engineering and business management are formidable but solvable. To the degree that the effort is successful, American society will benefit.

- o There has been and continues to be tremendous organizational and individual interest in the detailed rationale for the need for more minority engineering graduates and in the effort to achieve a 10-15 fold increase in minority engineering graduates.
 - . Distribution of Smith and Borch speeches to 66,000 business, educational, governmental, and minority leaders generated requests for 15,000 additional copies.
 - . Partial press coverage (39 items) is documented in supplementary book
- o The leaders of the minority community have endorsed the need, the goals and the effort wholeheartedly.



- o Major new and/or expanded efforts to meet special needs of minority students are being conceived, designed and implemented in engineering colleges. These efforts include a wide range of approaches such as pre-engineering studies during summer or weekends; co-mingled work and learning; tutorial assistance; academic, social and financial counselling; re-design of engineering curricula; and new teaching methodologies.

• 3-2 Programs

George Tech & Atlanta
University Center

Drexel and Lincoln

Dayton and Wilburforce

Vanderbilt and Fisk

Special Minority Approaches

Cornell

Case-Western

Newark

Alabama

Michigan State

Carnegie-Mellon

Kansas

Illinois

Minority Co-Op Programs

Cincinnati
Tennessee

Black Engineering Schools

Howard

Southern

Prairie View

Tuskegee

North Carolina A & T

Tennessee State University

- See Section II of supplementary letter book.

- o The National Academy of Engineering sponsored a minority engineering education conference on May 6-8, 1973 in Washington, D. C.

- See Section III of supplementary letter book.

- o An ad hoc guidance and motivation task force (technical societies, guidance counsellors, secondary math and science teachers, and National Urban League) is planning "grass roots" communications and recruiting programs for minority youth.

- Individual mailings and follow-up for over 5000 minority secondary students indicating interest in engineering.



- o The Conference Board is documenting basic data and convening industry leaders to discuss possible action programs.
 - . See Section III of this briefing book for National Council concept.
- o Major industrial corporations have concurred with the definition of need and have committed expanded support of existing and new efforts. .
 - . See Section III of this briefing book for representative companies that have participated in planning discussions.
 - . Various companies are providing the financial support for the NAE minority engineering education conference.
- o Model programs involving secondary schools, community colleges, engineering colleges, and industries are being implemented or planned in several cities.
 - . Secondary School Minority Program
 - California Institute of Technology
 - University of Massachusetts
 - . Community College Minority Program
 - State of Delaware
 - Bronx Community College
 - . Joint School/College/Employer Minority Programs
 - Louisville
 - Cleveland
 - Cincinnati
 - Burlington
 - Pittsfield
 - Schenectady
- o The Armed Services have indicated interest in "in-service" remedial and other programs to accelerate academic progress of minority and other potential engineering students.



- o An industrially sponsored motivational program for ghetto secondary schools and utilizing a "hands-on" mobile exhibit will be tested this fall.
- . General Electric is designing and developing this program. Multiplication through other sponsoring companies will be encouraged.



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* A BLUEPRINT

Excerpts From a Proposal

"The National Council of Minority and Women
Engineers and Associated Professionals"

- * The Proposals have not been included in this document for the sake of brevity. Moreover, at this point in the program evolution they have been revised and/or are in the process of being implemented.

SECTION III
BACKGROUND DISCUSSIONS
WITH
FEDERAL GOVERNMENT OFFICIALS

<u>Date</u>	<u>Organization</u>	<u>Official</u>	<u>GE Representative</u>
Sept. 1972- March, 1973	Dept. of Health, Education & Welfare	Peter Muirhead Willa Player	Joe Bertotti Lindy Saline Don Irwin
Sept. 1972- March, 1973	Dept. of Defense	M. Richard Rose Anthony Cardinale Frank M. McKernan	Bob Mills
Dec. 1972	Dept. of Labor.	Richard Grunewald Asst. Secretary of Labor	Frank Toner Tom Hilbert Jim Nixon
Dec. 1972	Dept. of Labor	Phil Davis Office of Federal Contract Com- pliance (OFCC)	Frank Toner Tom Hilbert Jim Nixon
Jan. 1973	Senate	Senator Harrison Williams Chairman-Labor Committee	Jim Nixon Dan Lowry Robert Barrie
March, 1973	Equal Employment Opportunity Commis- sion (EEOC)	Luther Holcomb Vice Chairman	Jim Nixon Tom Hilbert Jim Diamantopoulos
March 16, 1973	National Science Foundation	F. Guyford Stever President	Art Bueche Lindy Saline
March 30-31, 1973	Dept. of Labor	Paul Fasser Asst. Secretary for Labor-Manage- ment Relations	Virg Day
April 2, 1973	White House	Stanley S. Scott Presidential Asst.	Berkeley Davis

<u>Date</u>	<u>Organization</u>	<u>Official</u>	<u>GE Representative</u>
April 5, 1973	Dept. of Labor	Richard Schubert Under Secretary	Virg Day
April 6, 1973	Dept. of Labor	William Kohlberg Asst. Secretary for Manpower Robert Brown	Virg Day Lindy Saline Frank Toner Jim Nixon Dan Lowry
April 11, 1973	Dept. of Treasury	George Shultz	Reg Jones Virg Day Lindy Saline (Art Fletcher)
April, 1973	Dept. of Labor	Peter Brennan	Virg Day Lindy Saline Frank Toner Jim Nixon
April, 1973	Dept. of Health, Education & Welfare	Casper Weinberger	Virg Day Lindy Saline Jim Nixon Frank Toner
June, 1973	EEOC Full Commission		Frank Toner Fred Black Jim Nixon Jim Diamantopoulos
June, 1973	Dept. of Health, Education & Welfare	Norman Houston Deputy Asst. Secretary for Administration	Fred Black

SECTION IV

SECTION IV

WHY ADMINISTRATION SHOULD BE ENTHUSIASTIC

ABOUT ENDORSING THIS EFFORT

1. This may well be the only--at least proposed to date-- way to move decisively towards eventual economic parity among all societal elements which is essential to achieving and maintaining racial harmony within our society.

Economic parity for minorities requires that the profile of the minority work force be changed--not only for participation at the lower level echelons as has been emphasized so far--but also for participation and contribution at the highest management levels in industry which is the mainstream of American economic power. This effort is focused on changing the profile of the minority work force so it can participate effectively in the management of American industry.

2. No additional Federal money is required.
3. Image-building factors are all positive:
 - o Long-term, continuing effort--not an "over-night" panacea.
 - o Builds on individual dignity--not on paternalism--"helping people to help themselves" (reference President Nixon's Human Resources message on February 24, 1973, attached).
 - o Recognizes importance of career education concept (Administration's education philosophy espoused by HEW's Sidney Marland, Assistant Secretary for Education, and the basis for many Federal programs).
 - o Challenges private sector to help solve the greatest of all social and economic problems--rather than to look to Washington for a solution (reference Human Resources message).



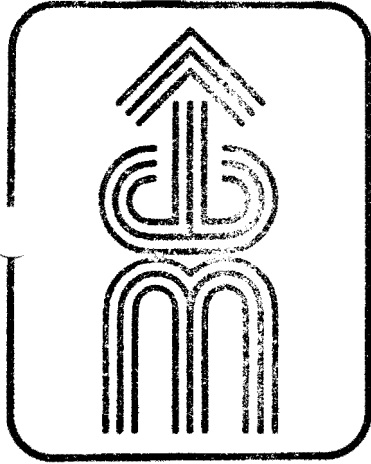
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Minorities in Engineering

A Program of the National Academy of Engineering

NEWSLETTER NUMBER ONE

NATIONAL ACADEMY OF ENGINEERING PROGRAM ON MINORITIES IN ENGINEERING
2101 CONSTITUTION AVENUE, N.W., WASHINGTON, D.C. 20418, TELEPHONE (202) 389-6417

July 1974

MASTER PLAN: COMMITTEE MAPS 10-YEAR MINORITY CAMPAIGN

The National Academy of Engineering is assembling a master plan for its nationwide campaign to bring about a ten-fold increase in the number of minority engineering graduates within the next decade. The planning document being drafted by the NAE Committee on Minorities in Engineering sets forth methods for coordinating all present and future programs aimed at encouraging young Americans of Black, Indian, Puerto Rican and Mexican/Chicano heritage to take up engineering careers. It also proposes several initiatives by the NAE, including the design of a "National Financial Assistance Fund" and management of a program to provide more minority students with summer jobs in the engineering field.

Under the plan, the NAE through its Committee on Minorities in Engineering would serve as the national focal point for the development of programs at the junior high school, high school, and college levels. The programs would identify potential engineering students from minority groups, help motivate and qualify them for matriculation in an engineering school, and assist them educationally and financially to successfully complete an engineering curriculum. There would be comprehensive supporting programs to increase the effectiveness of high school math and science teachers (including more bi-lingual teachers), more information on college placement and financial assistance, and greater emphasis on recruiting
(continued on page 2)

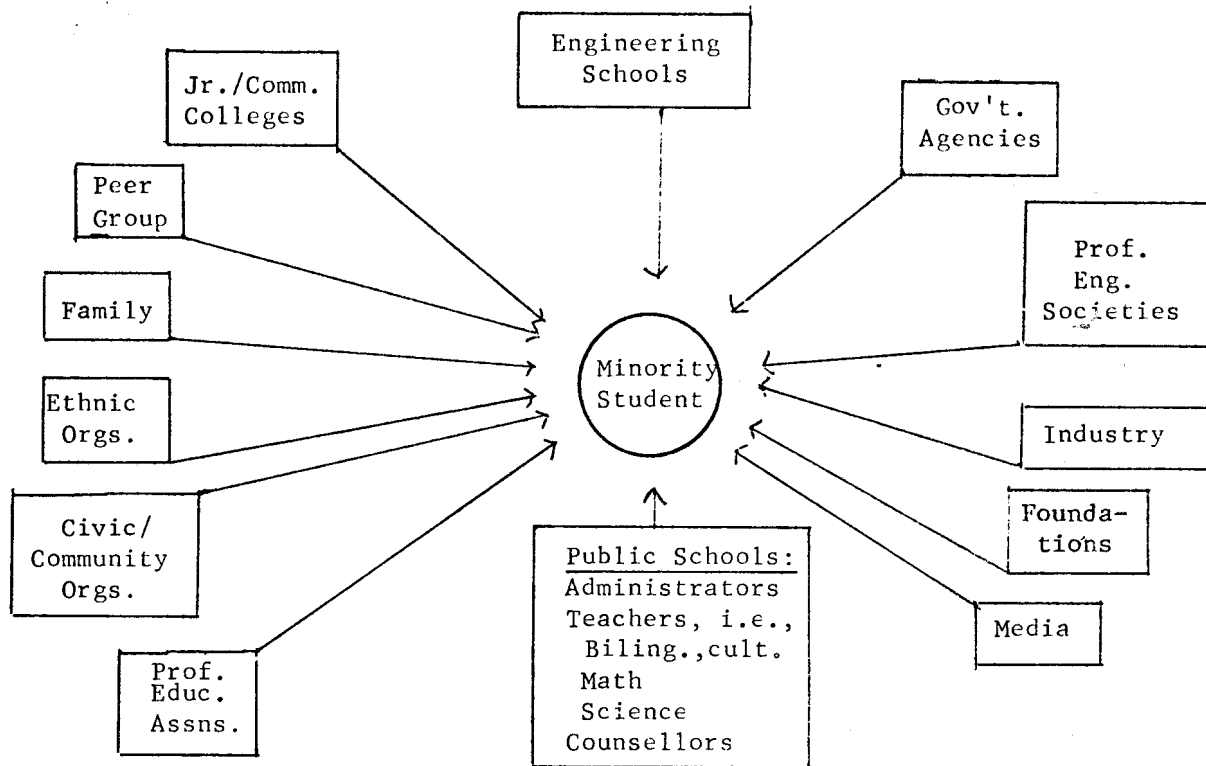
CORPORATIONS PLEDGE \$300,000 IN PROGRAM SUPPORT

Corporate members of the National Advisory Council on Minorities in Engineering (NACME) have pledged \$300,000 in corporate funds to support the NAE program to boost the number of minority engineering graduates. The money will be used to carry out the first year activities of the NAE Committee on Minorities in Engineering. The Committee's program is being financed solely with private funds.

The NACME, formed by invitation of NAE President Robert C. Seamans, Jr., is headed by Reginald H. Jones, Chairman of the Board and Chief Executive Officer of the General Electric Co. It is comprised of the leaders of some of the nation's major corporations, universities, and minority organizations, plus cabinet and sub-cabinet level government advisors. Richard J. Grosh, President of Rensselaer Polytechnic Institute, is Vice-Chairman.

The Council has a mission to help mobilize industry, government, and the educational community and to advise the NAE President and Committee. The Committee is playing the
(continued on page 2)

2. Possible Programs, Institutions or Organizations That Influence Career Choice.



MASTER PLAN...

qualifiable engineering candidates from high school and college. The master plan establishes linkages on the decision-making level with the organizations and institutions which influence the career choice and education of minority students and their eventual employment. (See Chart above.)

Once approved, complete details of the plan, which assumes that "action" programs of academic, professional and industrial groups will continue and expand, will be reported in a subsequent newsletter.

SUBCOMMITTEES AT WORK

The master plan has been drafted with the assistance of four subcommittees. Each subcommittee covers a particular segment of the coordinating campaign and in the course of their work they have carefully reviewed all of the recommendations generated by the 1973 NAE Symposium on Increasing Minority Participation in the Engineering Profession.

The subcommittees and their chairmen are:

Engineering Education - Dean Austin Greaux,
Prairie View A&M University.

(continued on page 3)

FUNDS PLEDGED...

coordinating role to supplement the activities of others already working to create more minority engineers.

Other members of the Council are: Dr. Holt Ashley, Chairman, Coordinating Committee of Engineering Society Presidents; S.D. Bechtel, Jr., Chairman, The Bechtel Group; Dr. Lewis M. Branscomb, Vice President and Chief Scientist, I.B.M.; Donald C. Burnham, Chairman, Westinghouse Electric Corp.; Dr. John C. Calhoun, President, American Society for Engineering Education; Dr. James E. Cheek, President, Howard University; John D. deButts, Chairman, AT&T; John Z. DeLorean, President, National Alliance of Businessmen; Dr. Alfredo de los Santos, Jr., Chairman, El Congreso Nacional de Asuntos Colegiales; Christopher Edley, Executive Director, United Negro College Fund, Inc.; John D. Harper, Chairman, Aluminum Co. of America; The Reverend Theodore M. Hesburgh, President, University of Notre Dame; J.K. Jamieson, Chairman, EXXON; Vernon V. Jordan, Executive Director, National Urban League; E.R. Kane, President, E.I. DuPont de Nemours & Co.; Melvin R. Laird; Alex C. Mair, Vice President, GMC Truck and Coach Division; C. Peter McCollough, President, Xerox Corp.; William

(continued on page 3)

SUBCOMMITTEES...

Pre-Engineering Education, Motivation and Guidance - Calvin H. Conliffe, General Electric Co.

Financing and Financial Aid Programs - Dr. Andrew Schultz, Jr., Cornell University.

Manpower Utilization - David Ford, Allen Bradley Co.

The Education Subcommittee is preparing an overview of various approaches currently being employed by engineering schools to increase their enrollments of minority students and to retain them. Tentatively titled ALTERNATIVE APPROACHES TO MINORITY ENGINEERING EDUCATION, the document will be distributed to all schools of engineering to stimulate a greater interchange of ideas and information.

FUNDS PLEDGED...

R. Orthwein, Jr., President, McDonnell-Douglas Automation Co.; Robert W. Sarnoff, Chairman, RCA; Dr. Robert C. Seamans, Jr., President, National Academy of Engineering (Ex-officio); Edgar B. Speer, President, U.S. Steel Corp.; Rev. Leon H. Sullivan, Executive Director, Opportunities Industrialization Centers; James F. Towey, Chairman, Olin Corp.; Alexander B. Trowbridge, President, The Conference Board; Roy Wilkins, Executive Director, NAACP; F. Perry Wilson, President, Union Carbide Corp.

Government advisors: Peter J. Brennan, Secretary of Labor; Dr. Malcolm R. Currie, Director, Defense Research and Engineering; John H. Powell, Jr., Chairman, E.E.O. Commission; H. Guyford Stever, Director, National Science Foundation; and Caspar W. Weinberger, Secretary of Health, Education and Welfare.

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MEMBERS OF THE COMMITTEE

The work of the National Academy of Engineering is performed through advisory or study committees, each of which is self-supporting. Most of them are discharged once the task for which they were organized has been performed. There is usually a small support staff attached to each committee, but members of committees contribute their time.

The Committee on Minorities in Engineering is the newest of the NAE Committees. Members are:

Chairman: Richard J. Grosh, President,
Rensselaer Polytechnic Institute
Vice Chairman: Arthur G. Hansen, President,
Purdue University

Arthur E. Anderson
General Products Division - I.B.M.
Jack A. Baird
American Telephone and Telegraph Co.
Pepe Barron
Office of Spanish Speaking Fomento,
Amer. Assoc. of Comm. and Jr. Colleges
James E. Bostic, Jr.
Department of Agriculture
Herman R. Branson
Lincoln University
Randolph W. Bromery
University of Massachusetts

Calvin H. Conliffe
General Electric Co.
Cesar DeLeon
Office of Pipeline Safety, Department of Transportation
Cleveland Dennard
Washington Technical Institute
David Ford
Allen Bradley Co.
Paul E. Gray
Massachusetts Inst. of Technology
Austin E. Greaux
Prairie View A&M University
Louis Padulo
Stanford University
Percy A. Pierre
Howard University
David R. Reyes-Guerra
Engineers' Council for Prof. Devel.
Lindon E. Saline
General Electric Co.
Andrew Schultz, Jr.
Cornell University
Herman B. Smith, Jr.
Office for Advancement of Public
Negro Colleges and Committee to
Increase Minority Professionals
in Engineering, Architecture and
Technology
Morris Thompson
Bureau of Indian Affairs

OUR NEWSLETTER

This is our first newsletter. We will use it periodically to tell you about NAE participation in programs to increase minority participation in the engineering profession. We will also report on what others are doing.

HOW WE GOT TO WHERE WE ARE

Slightly over a year ago, the National Academy of Engineering sponsored a symposium in Washington, D.C. on Increasing Minority Participation in the Engineering Profession. It was attended by more than 250 participants including engineering educators and students from both predominantly white and predominantly Black schools, representatives of minority social action groups, professional and technical societies, foundations, industry and government. The Symposium objective, simply put, was to assemble the best minds among those most closely associated with the problem and let them exchange information to develop recommendations as to the most effective short- and long-range strategies for action by all concerned.

Participants in the Symposium unanimously proposed a national goal of increasing the annual number of minority engineering graduates from 500 to 5,000 within a decade. To realize the goal, they recommended that the National Academy of Engineering act as the national coordinator of the many activities in education, industry, government, professional-technical societies focusing on the motivation, guidance, and education of minority youngsters now under way or planned.

The first implementation of the recommendation was the formation of the National Advisory Council on Minorities in Engineering. The Council will meet twice a year, but each member of the Council has appointed a personal representative who will interact intimately with the new operating committee of the NAE--the Committee on Minorities in Engineering.

MINORITIES IN ENGINEERING RESOURCE CENTER

The NAE Committee on Minorities in Engineering has established a clearinghouse for materials and information on minority engineering programs. Schools, organizations, industry are requested to send materials relating to their minority engineering programs to the Committee, 2101 Constitution Ave., NW, Washington, DC 20418. They will be used to develop an overall portrait of current and proposed efforts.

OTHER ACTIVITIES-OTHER PROGRAMS

Black Engineering Colleges Development

While there is no such thing as "Black" engineering or "Brown" engineering or "white" engineering, most of our readers know that for many years an American Society for Engineering Education Committee has existed which is now called the Black Engineering Colleges Development Committee. In 1964, ASEE created a program to assist the traditionally Black engineering colleges, first to attain ECPD accreditation and then to develop further the quality of the education provided Black students aspiring to become engineers. When the program began, Howard University's engineering school was the only one accredited. Tuskegee Institute was already well on the way to accreditation, which it attained in 1965. All the others gained accreditation from the Engineers' Council for Professional Development by 1972.

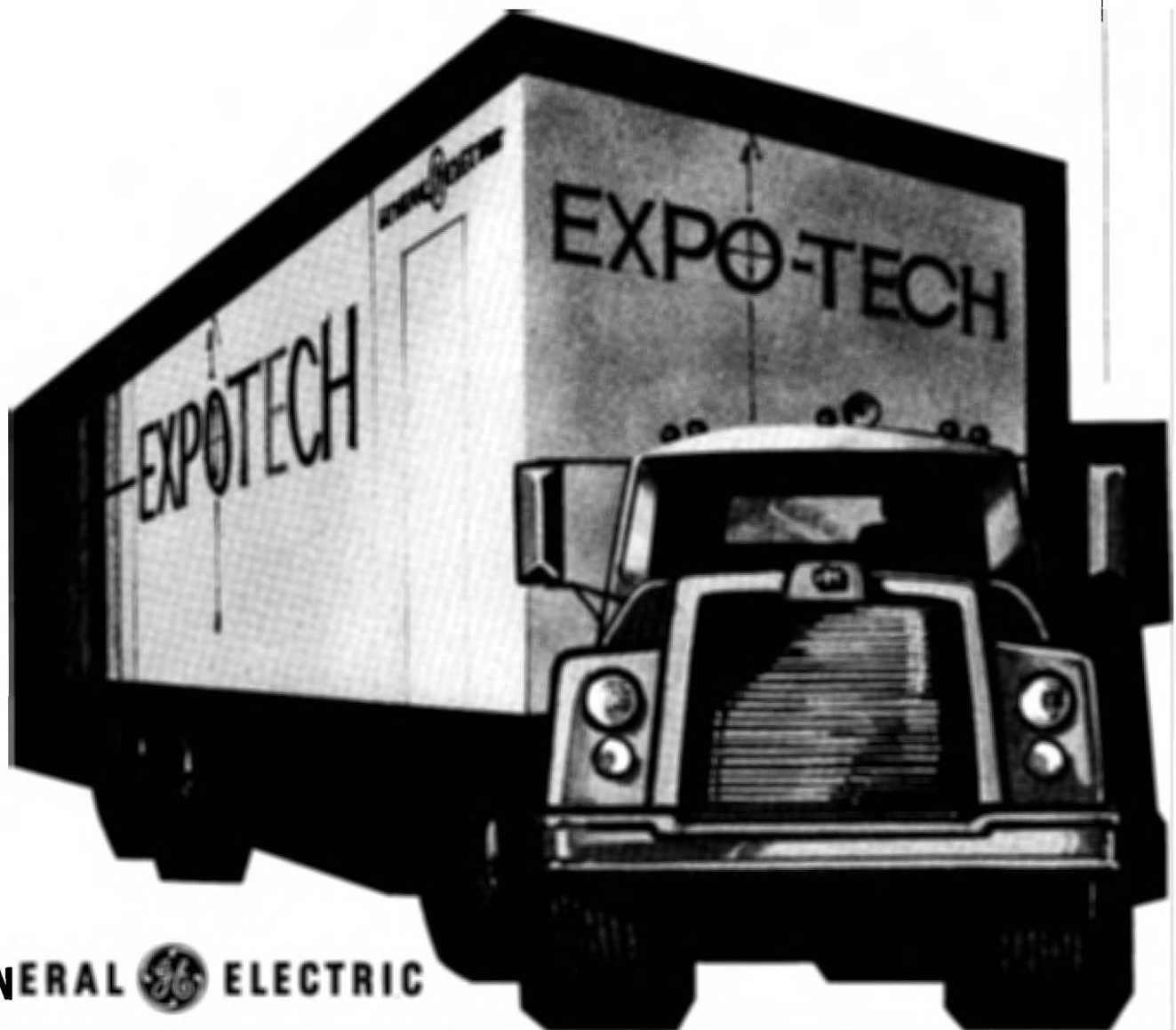
Originally the program was built around an exchange of engineering faculty between Black and white educational institutions. Now it includes recruitment of Black high school students, the establishment of pre-college programs, effective teaching institutions, faculty development and faculty recruitment and retention.

Science and Engineering Recommendations Released to Agency Heads by Cabinet Committee.

Heads of 23 federal agencies have received finalized recommendations from a Cabinet Committee task force stressing increased involvement of the Spanish Speaking in the science and engineering professions.

Henry M. Ramirez, Chairman of the Cabinet Committee on Opportunities for Spanish Speaking People (1707 H Street, N.W., Washington, D.C.), released the recommendations of the Task Force of Hispanic Scientists and Engineers on June 13, 1974, which were developed during its December conference.

here comes
**EXPO
TECH**



GENERAL  ELECTRIC

In a few months, General Electric will introduce a new concept in educational communications. It's called EXPO-TECH and it's a mobile preview of the exciting world of engineering.

EXPO-TECH is an integral part of General Electric's Program to Increase Minority Engineering Graduates. Its specific purposes are to motivate minority students at the junior high school (or middle school) level toward engineering and to demonstrate the importance of high school science and math in preparing for an engineering education. It is aimed at the junior high school level because

these students will soon be faced with choosing their high school courses.

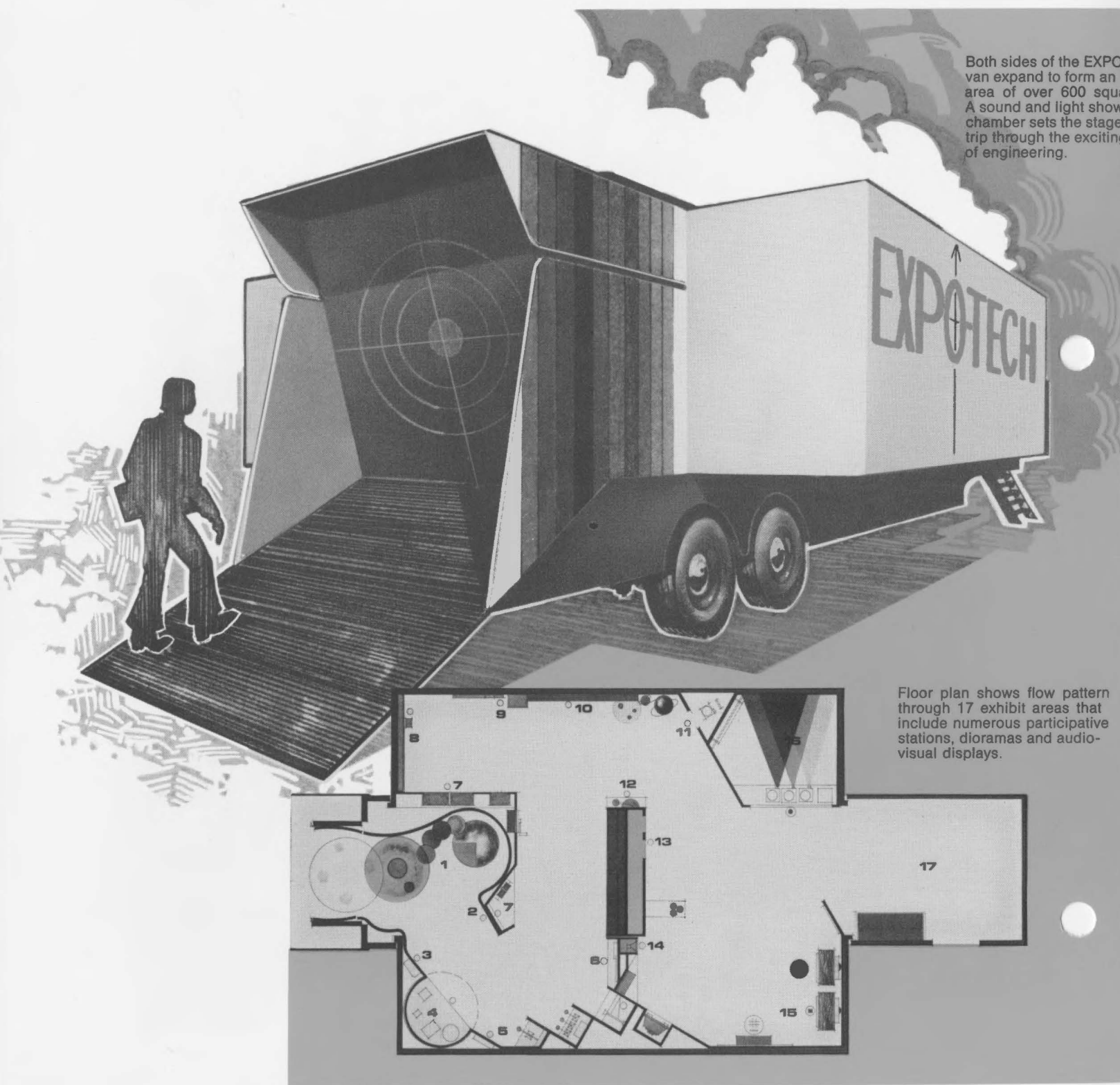
The concept of a mobile exhibit is not new. Many of them have proven successful in providing all sorts of useful information to students. What makes EXPO-TECH unique, however, is its broad range of participative exhibits designed not only to motivate, but to indicate engineering aptitudes. They are housed in a 40-foot trailer with expandable compartments on both sides. When opened for exhibition, EXPO-TECH has over 600 square feet of floor space. In this area there are participative exhibits on the simple

machines, magnetism, generators, geometry, the elements, light, sound, electronics, and many more. There is a mini-theater with a multi-media presentation on engineering at work in today's society and a self-evaluation exhibit in the exit area. Verbal descriptions and instructions come through audio phones at each exhibit station.

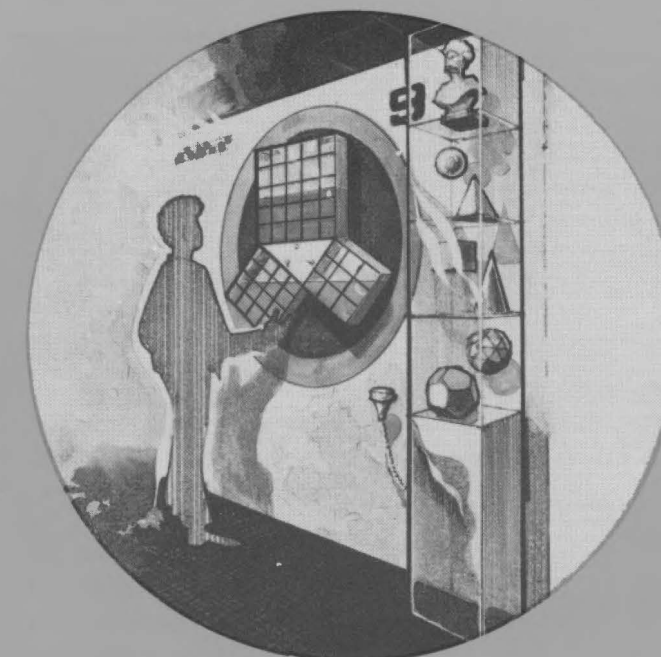
While all this makes EXPO-TECH a self-contained motivational experience, it is much more than a one-shot mobile exhibit. It is, rather, the initial thrust for a plant community educational relations program that can include pre-visit preparation as well as a variety of follow-up

activities. Teacher's Guides and special motivational booklets will be distributed. Junior engineering clubs can be formed. Big brother programs and plant visits can continue the motivational effort. For GE operations that already sponsor such activities, EXPO-TECH will serve as a bonus activity.

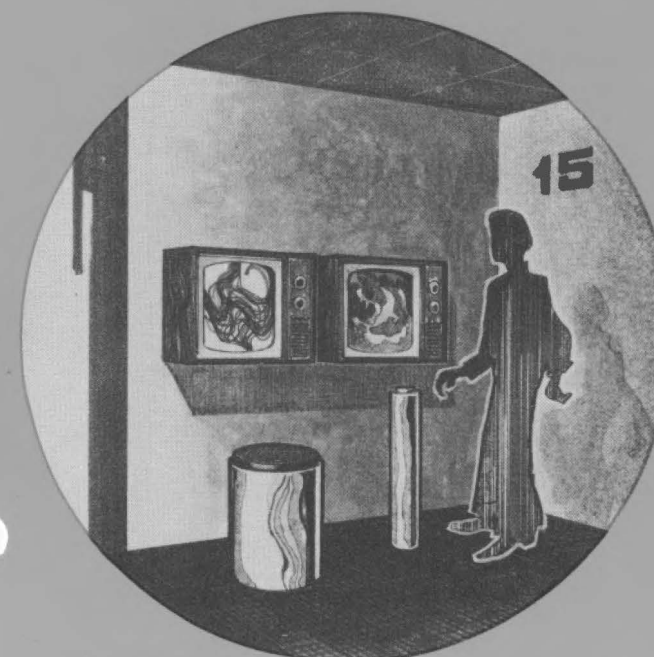
The EXPO-TECH program will premier in the Philadelphia area. After that it will head for other GE plant cities that have significant minority populations. Specific schedules will be published later in the year.



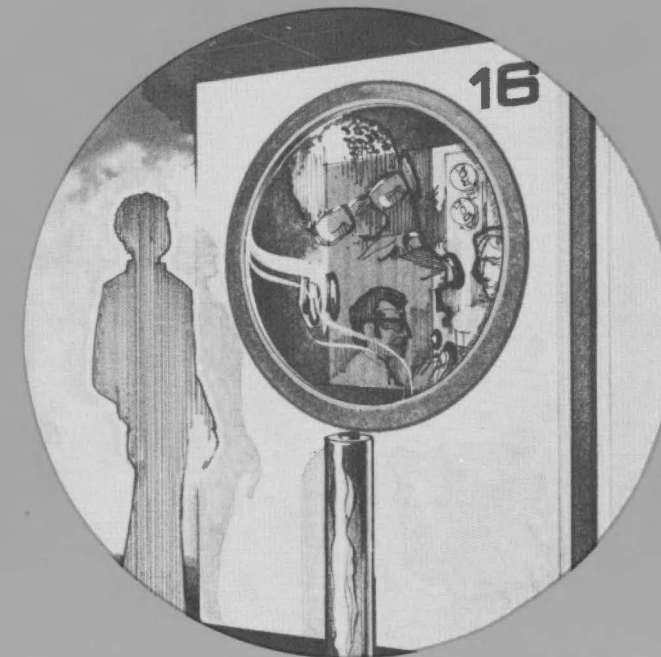
Students will experience the basic principles of physics - levers, pulleys, inclined plane - at this participative exhibit area.



Three dimensional geometry exhibits will permit students to see for themselves why math is fundamental to engineering.



Electronic exhibits will illustrate some of the engineering wonders that can be accomplished when engineers combine math and science.

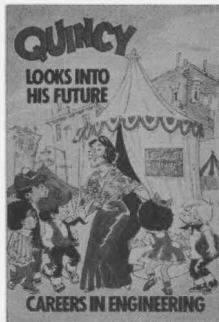


A multi-media mini-theatre will show how engineers put science and math to work for mankind in today's world.

Engineering: A golden opportunity for all

The EXPO-TECH program is just one of many new General Electric communications activities aimed at increasing the number of minority engineering graduates. Some of the programs are prepared specifically for elementary and secondary school students. Others are oriented toward teachers and counselors. And still others are aimed at minority college students and other people who are influential with minority youth.

"Quincy", the delightful comic strip character created by Ted Shearer has been enlisted to help motivate elementary and middle school students to think about engineering. The "Quincy" comic book will be 36 pages in vivid colors and offer follow-up information and assistance. Initial distribution will be coordinated with community relations activities in General Electric plant cities starting in the Fall.



General Electric's "world of work" booklets, ads, and posters have been adapted to fit in more closely with the minority engineering thrust at the secondary school level. Additional quantities of "What's It Like To Be An Engineer" will be printed to handle the volume of requests from teachers, counselors and minority organizations.



Special buttons and pamphlets carrying the theme, "Engineering: A golden opportunity for all", have already been distributed to thousands of guidance counselors. Additional quantities are available for career days, plant visits and other educational relations activities.



A series of advertisements directed to minority college students and other influential groups have been running in minority media throughout 1973. Each ad asks the readers to help motivate minority youth toward engineering and offers assistance in the form of booklets

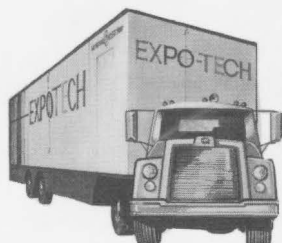
(e.g., "What's It Like To Be An Engineer").

A new corporate publication features profiles of 24 minority men and women at General Electric and also provides a progress report on the Company's equal opportunity programs. It is now available for internal and external distribution.

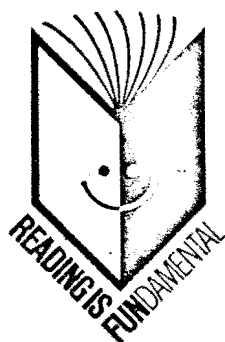


For additional information on these programs, write to:

Corporate Educational Communications (PIMEG)
570 Lexington Avenue, Room 901
New York, N.Y. 10022



GENERAL  ELECTRIC



March 22, 1974

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Vice President
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Managing Director
Mrs. Eleanor Smollar

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Mr. Jack Drown
Hon. Sol M. Linowitz
Mr. Edward P. Morgan
Mr. Harold Roth

Mr. Reginald H. Jones
Board Chairman and Chief
Executive Officer
General Electric Company
570 Lexington Avenue
New York, New York 10022

Dear Mr. Jones:

I am most grateful to you and General Electric for the contribution of \$6,000 to the Reading Is Fundamental (RIF) Program. We also wish to express our deep appreciation for the interest and cooperation of Mr. Fred Black, Equal Opportunity Manager on Frank Toner's staff.

I have enjoyed the little book Quincy which Mr. Black is making available to RIF Programs. I am sure it will be very popular with the children served by the over 160 RIF projects throughout the country.

We are sending you our RIF Newsletter and a recent Reader's Digest article on RIF. Again many thanks to you and General Electric.

Most sincerely,

Mrs. Robert S. McNamara

Enclosures:

Reader's Digest article
Newsletter 4:1
Flyer

cc: Mr. Fred Black

RIF, Inc.
Smithsonian Institution
A&I 2407
Washington, D.C. 20560
(202) 381 6117

GENERAL ELECTRIC

CORPORATE EMPLOYEE RELATIONS

GENERAL ELECTRIC COMPANY . . . 3135 EASTON TURNPIKE, FAIRFIELD, CONN. 06431
Phone (203) 373-2211

September 6, 1974

Mr. Art Fletcher
1627 K Street, N. W.
Washington, DC 20006

Dear Art:

You recently indicated President Ford's interest in voluntary innovative manpower and education programs. You felt he may well appreciate the opportunity to learn more about a nation-wide effort to increase the number of minority engineers and ultimately the number of minorities in leadership positions in industry. As you know, Reg Jones is Chairman of the National Advisory Council on Minorities in Engineering, and he would welcome the opportunity to have the President drop in on the next meeting in Washington on September 18, or to express his support.

The Advisory Council is working with the National Academy of Engineering, under Bob Seamans' leadership, to unite industry, education, government and labor in finding ways to increase the number of minority engineers in our country. Last year there were only 657 black engineering graduates compared to the total of 43,429 or 1.5%; other minorities accounted for less than 2%. The goal is to increase the number of minority engineering graduates tenfold within the next decade. Many government officials are on the Advisory Council, including Secretary of Labor Peter Brennan, Secretary of Health, Education and Welfare, Casper Weinberger, and John Powell, Chairman of the EEOC. Among other members are chief executive officers of AT&T, US Steel and other major industries, leading educators and John Condon, President of the National Alliance of Businessmen. A full roster of Council members is attached.

Please let me know if the President can drop in at the meeting at the National Academy of Science on the 18th, or otherwise express his support

Mr. Art Fletcher


Page 2

September 6, 1974

of the Minority Engineering Education effort, perhaps via a taped message or having a cabinet member act as his spokesman.

Thank you for your help on this effort.

Sincerely,



Frank J. Toner, Manager
Employee Relations Management
& Practices

ps

Attachment

cc: L. H. Maier

F. H. Black ✓

PLANNING AGENDA

NATIONAL ADVISORY COUNCIL ON MINORITIES IN ENGINEERING (NACME)

Wednesday, September 18, 1974
10:00 AM - Noon

The Board Room
National Academy of Engineering
Washington, D. C.

9:30 - 10:00	COFFEE	
10:00 - 10:15	OPENING Welcome; introductions; acknowledgement of plurality of efforts under way and signs of progress; acknowledge support and involvement of NACME organizations; hint at need to expand industrial base of NACME membership as the NAE leadership role emerges.	Reg Jones Chairman, NACME
	SLOAN TASK FORCE REPORT MINORITY ENGINEERING: BLUEPRINT FOR ACTION	
10:15 - 10:30	<u>Presentation</u> Brief summary of numerical goals, definition of minorities, new insights, critical issues/needs, previously mailed recommendations, implications for NAE and other participant groups. Use question and discussion period for clarification and elaboration.	Lou Padulo Chairman, Sloan Task Force
10:30 - 10:45	Questions and Discussion	

THE NAE EFFORT

10:45 - 10:55	<p><u>Commitment</u> Note NAE approach is consistent with Sloan Task Force recommendations; acknowledge funding, liaison and personnel support from NACME members; announce and introduce Executive Director and staff; remind NACME of long-term effort and NAE's determination. Most of this can be gleaned from Seaman's Crotonville talk.</p>	<p>Bob Seamans President, NAE</p>
10:55 - 11:10	<p><u>Status Report on NAE Committee</u> Summarize actions accomplished, in process, or planned for next 6 months; mention sub-committee chairmen and participation from NACME organizations; invite their further involvement. Urge NACME organizations to initiate "local" efforts. Much of this can be gleaned from Seaman's Crotonville talk.</p>	<p>Dick Grosh Chairman, NAE Committee on Minorities in Engineering</p>
11:10 - 11:25	<p><u>Financial Aid for Students</u> Review financial need and connect to Sloan Task Force; review complementary approaches and connect to previously mailed description; examples of major fund raising efforts; acknowledge need to re-focus already appropriated Federal funds; ask for feelings, judgments and counsel; ask for a specific order.</p>	<p>Andy Schultz Chairman, Finance Task Force of NAE Committee</p>
11:25 - 11:40	<p>Questions and Discussion</p>	

11:40 - 11:50 (Tentative)	HOW EEOC VIEWS THE MINORITY ENGINEERING EFFORT (Tentative) Present insights, guidance, and encouragement to employers and educational institutions as viewed by compliance agency. Is the effort likely to be worthwhile? How can the outcome be enhanced?	John Powell Chairman, EEOC
11:50 - 11:58	GENERAL DISCUSSION	Reg Jones
11:50 - 12:00	CLOSING Summarize action steps for NACME members (to be confirmed by follow- up letter); thank participants, an- nounce next meeting on February __ (?) or March __ (?) invitation to visit Expo-Tech.	Reg Jones

ALPHABETICAL ROSTER

National Advisory Council on Minorities in Engineering

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-3-

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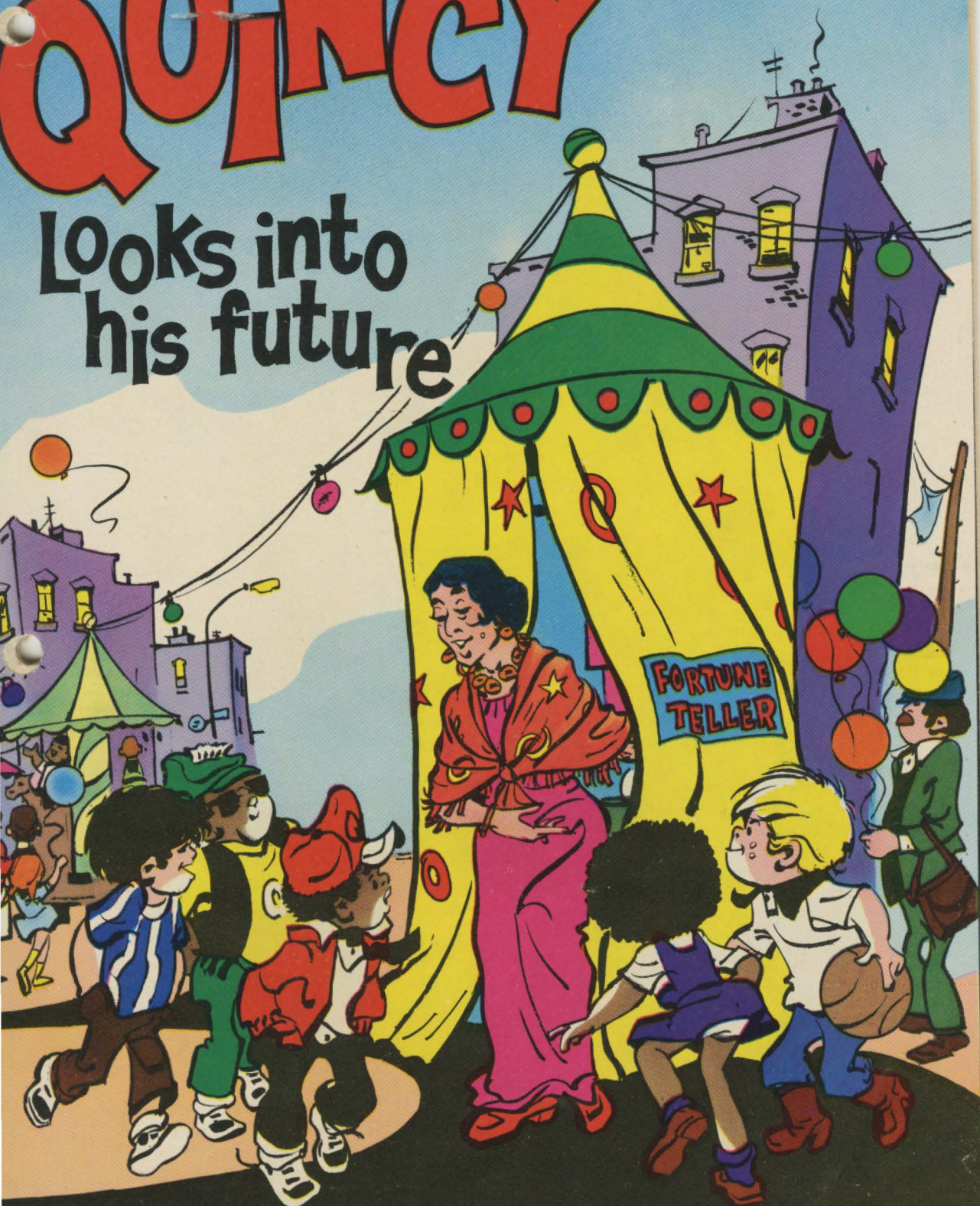
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The Honorable H. Guyford Stever
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The Honorable Caspar W. Weinberger
Secretary of Health, Education and
Welfare
330 Independence Avenue, S. W.
Washington, D. C. 20201

QUINCY

Looks into
his future



CAREERS IN ENGINEERING

SECTION VII

REPORTER DISPATCH (White Plains, New York)

August 13, 1974

Engineers in demand from minorities

By VICTOR RIESEL

Is there ore than tok-
enism in the executive
suites of American

AMERICAN industry has
made great strides in bringing
Afro-Americans and other mi-
norities onto the payroll in re-
cent years. At General Elec-
tric, for example, while our
overall employment has not

Latest surveys show that, of
the estimated 805,000 engineer-
ing graduates in this country

demically and financially.

Then industry helps by pro-
viding summer jobs and co-op

Business & Society

A Biweekly Report on Business & Social Responsibility

Vol. 7, No. 7

Editor: Milton Moskowitz

April 16, 1967

news from the NATIONAL ACADEMY OF ENGINEERING

The National Academy of Engineering is a private organization established in 1964 to share in the responsibility given the National Academy of Sciences under its Congressional charter of 1863 to advise the Federal Government, upon request, in matters of science and engineering; to sponsor engineering programs aimed at meeting national needs; to encourage engineering research; and to recognize distinguished engineers.

2101 CONSTITUTION AVENUE, N.W., WASHINGTON, D.C. 20418

AREA CODE 202 EX 3-8100

For further information call
Micah Naftalin, 389-6785

CORPORATE, UNIVERSITY, MINORITY AND GOVERNMENT HEADS MEET TO PLAN MINORITIES IN ENGINEERING CAMPAIGN

FOR RELEASE: 6 p.m., Wednesday, February 13, 1974

WASHINGTON -- Reginald H. Jones, Chairman of the Board and chief executive officer of the General Electric Company, convened the first meeting of the National Advisory Council on Minorities in Engineering (NACME) in Washington, D.C. today. The Council, comprising heads of some of the nation's leading corporations, universities, and minority organizations, together with cabinet and sub-cabinet level governmental advisors, has been formed by invitation of Robert C. Seamans, Jr., President of the National Academy of Engineering (NAE), to provide counsel to the Academy in leading a national drive to achieve, over the next decade, a ten-fold increase (4,000-6,000 annually) in the number of minority persons entering the engineering profession. Richard J. Grosh, President, Rensselaer Polytechnic Institute, is Vice-Chairman.

Dr. Seamans noted: only 579 of the 44,190 who received BS degrees in engineering in 1972 were black; few statistics, if any, are available on members of other minority groups. The engineering profession must face squarely the objectives to provide increased opportunities for minorities and to provide for their fullest possible utilization in the application of technology to the needs of society.

In convening the meeting, Jones made what he termed the "critical point" that, "although 18 percent of our population are members of minority groups (black, native American, Spanish-surnamed, Oriental Americans) only 1½ to 2 percent of engineering graduates are minority persons. It seems to us that progress towards integrating our management structure will be minimal unless the supply of minority engineering graduates increases dramatically -- and even then we are facing a challenge that may not be met to our satisfaction for a generation or two."

"There is much groundwork now in progress, but the total effort would benefit from a recognized national leadership. The NAE is now providing that leadership," Jones concluded.

The Council will provide advice and assistance to a new operating Committee on Minorities in Engineering of the NAE, which held its first meeting in mid-January. Grosh and Arthur G. Hansen, President, Purdue University, serve, respectively, as chairman and vice-chairman of the NAE committee. The industrial members of the council have also pledged financial support to the committee.

At this first meeting, the council reviewed the preliminary program and plans of the committee, which will include improved data gathering, the development of a scholarship program, and the coordination and fostering of existing and future activities in industry, government and the educational community. "The Academy envisions a supplementary and leadership role. While we will not shrink from those activities which may seem appropriate, we have no intent to supplant the activities or plans of others in the academic, industrial, governmental, minority or professional society communities," Dr. Seamans stressed.

A list of members of the Council is attached.

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