NSBE Purdue Book – Presentation Format

Draft 2

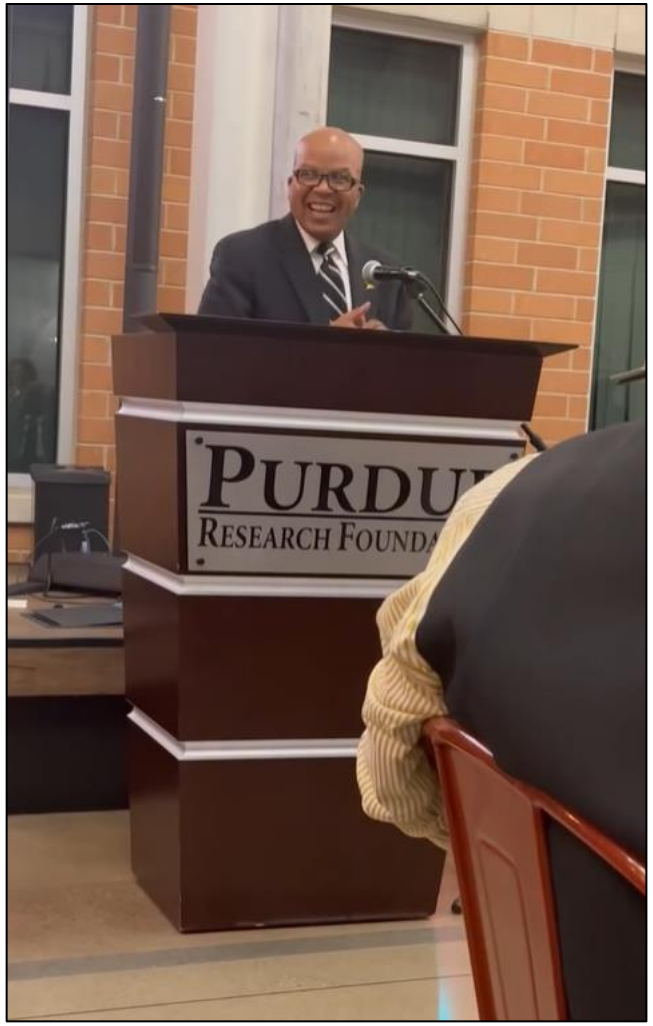
The Story of the National Society of Black Engineers
The Founding at Purdue University
By Co-Founder, George Smith

The Untold Story of the Founding of NSBE

From West Englewood to West Lafayette, to the Western World!!

by George Smith, NSBE Co-Founder

Chapter Outline



Purdue Pathfinding Men Award

In Honor and Recognition of Achievement Beyond Boundaries

George A. Smith

April 15, 2023

Awarded by the Purdue Black Alumni Association

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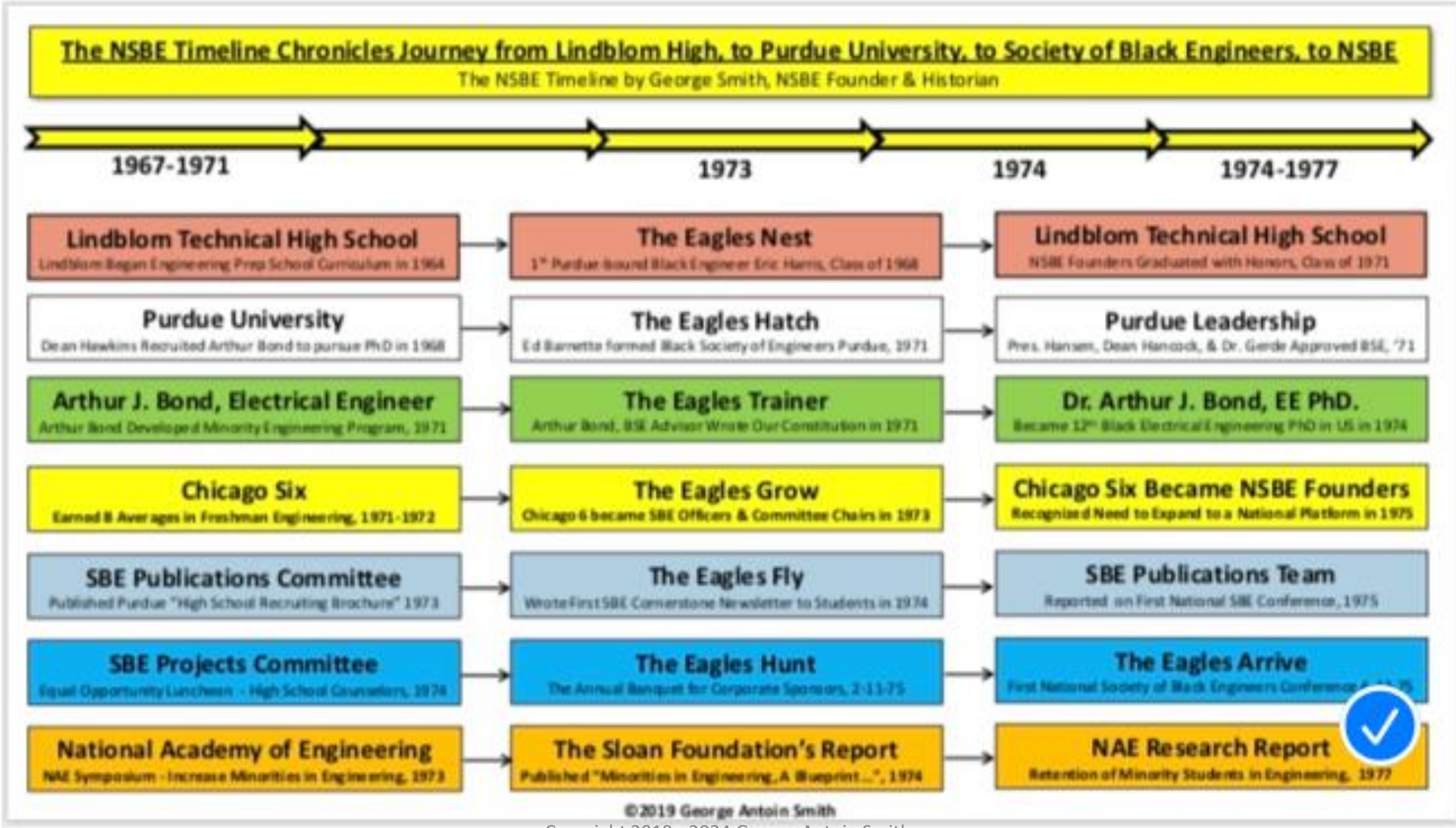
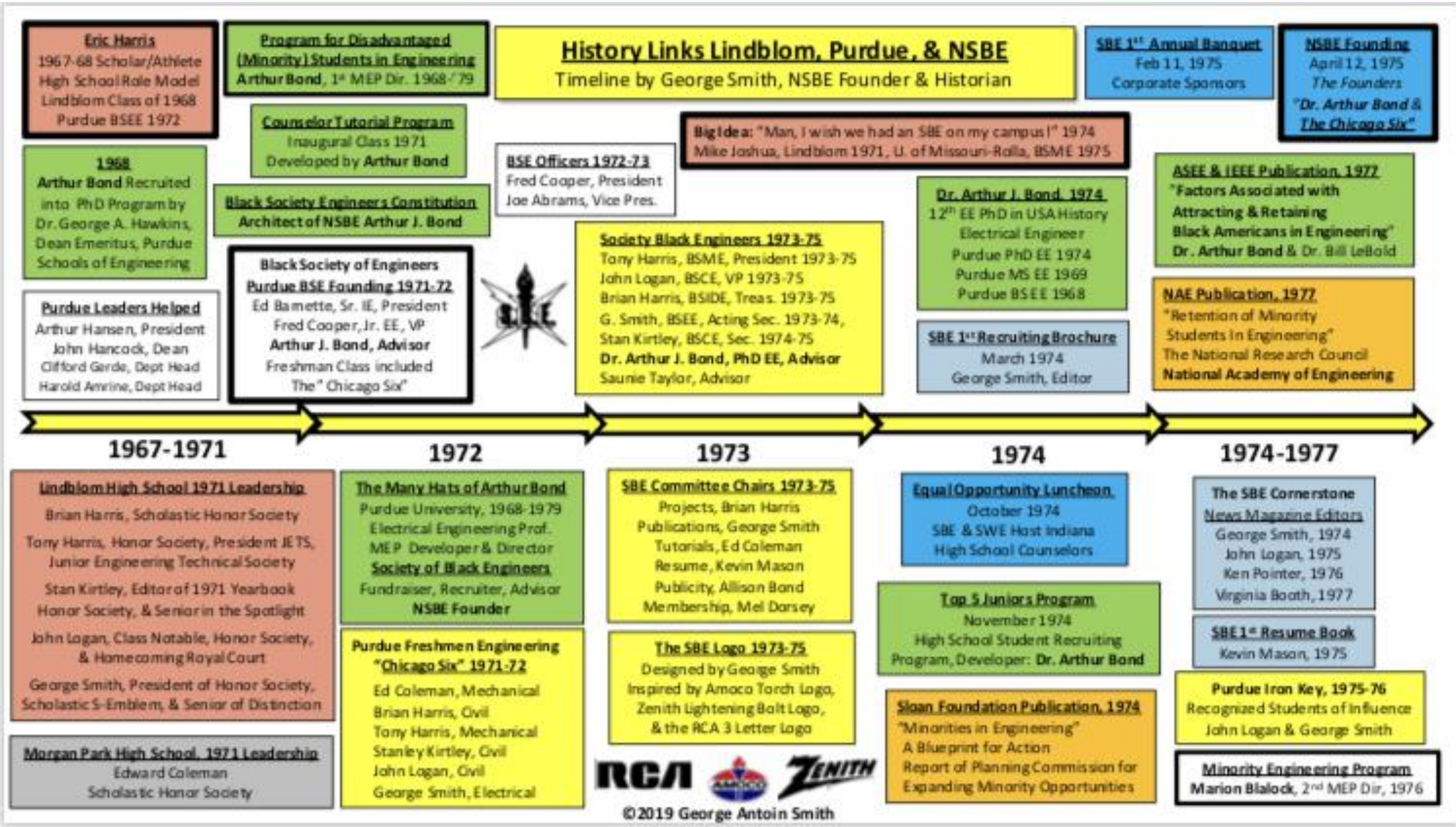




The Cornerstones of the National Society of Black Engineers

PURDUE

NSBE

NAE/MEP

1969
80% of Purdue's Black freshman engineering students struggled academically and decide to change majors, schools, or drop out of college.

1971
Art Bond began a suite of MEP programs designed to recruit & retain Black freshmen engineering students. 80% of the 1971-'72 MEP class succeeded.

1972-1973
The BCC, MEP, and SBE put Bond's students on a fast track to engineering internships. NSBE Founders, The Chicago Six, were among the first to reap the benefits.

1973 - 1974
Chicago 6 takes on Leadership of the SBE and establishes Officers and Committee Chairs. Work began on the completion of committee objectives.

Oct 24, 1974
Equal Opportunity Luncheon to introduce the Purdue SBE and SWE to Indiana High School Counselors.

April 12, 1975
The Inaugural Conference of the National Society of Black Engineers

June 12, 1975
Committee on Minorities in Engineering: Workshop for Program Directors in Engineering Education of Minorities.

1977
Research Paper: Attracting and Retaining Black Americans in Engineering at Purdue presented at the Frontiers in Education Conference by Dr. Arthur J. Bond.

1969 - 1971
Arthur Bond was recruited to pursue a PhD in engineering, join the faculty, help plan a new Black Cultural Center (BCC), & create Purdue's Minority Engineering Program (MEP).

1971 - 1972
Ed Barnette asked Art Bond to help gain approval to start Purdue's Society of Black Engineers (SBE). Bond wrote the Constitution, sold the Dean, and became the Faculty Advisor.

July 25, 1972
In 1971, only 407 of 43K engineer grads were Black. GE's J. Stanford Smith called for a 10X increase of minority engineer grads by 1979 or face tragic social problems.

May 6-8, 1973
NAE Symposium on "Increasing Minority Participation in Engineering.

Dec 6. 1974
The Purdue SBE Placement Brochure was printed & sold to Corporate Recruiters.

Feb 11, 1975
First Corporate Recruitment Banquet.

1976-1977
The 2nd and 3rd NSBE Conferences continued to build on the foundation launched at Purdue.

1978
Testimonial Letters acknowledging the influence of Dr. Arthur Bond on the national and Purdue effort to increase minorities in engineering.

The Introduction: Dr. Arthur Bond & The Chicago Six Prep School Story

Architect of NSBE

Arthur J. Bond, PhD

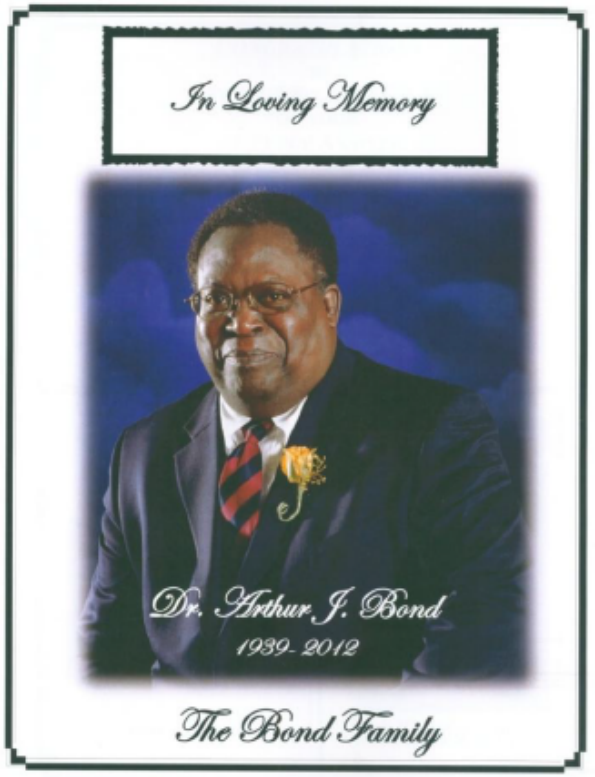
Electrical Engineer

1968 - BSEE Purdue

1969 - MSEE Purdue

1974 - PhD EE Purdue

Minority Engineering Program Visionary



Semiconductor Engineering Pioneer:

1964 - Linde Labs ***1st*** Ruby Laser Rangefinder

1980 - R & D Engineer RCA VideoDisc System

1984 - Bendix/Boeing Fiber Optic Controls

Highly Influential Engineering Educator:

1968 - Engineering Professor at Purdue

1989 - Head of EE Dept. at Tuskegee Univ.

1992 - Dean of Engineering, AL A&M Univ.

NSBE Founder

Leader of Chicago Six

RESUME
NSBE Founder: Dr. Arthur J. Bond

RESUME

Arthur J. Bond

Home Address: 1023 Stones Throw Lane, Huntsville, AL 35806 ; (205) 430-0342
Office Address: Room 115, Carver Complex North, Alabama A&M University, Normal, AL 35762; Phone (205) 851-5560; FAX (205) 851-5580
Mailing Address: Post Office Box 1148, Normal, AL 35762-1148

EDUCATION

PhD - Purdue University, 1974
MSEE - Purdue University, 1969
BSEE - Purdue University, 1968

Specialty Area - Solid State & Electron Devices
Thesis Title - "A Superconducting Sampling System"
Major Professor - Vernon L. Newhouse

Continuing Education - National Management Assoc.:
Building The Personal Skill System - 1.4CPU, 2/87.
Professional Management Development - 1.4CPU, 5/88.

EXPERIENCE

1992-Pres ALABAMA A&M UNIVERSITY, Normal (Huntsville), Alabama.

Dean, School of Engineering and Technology

1968-1979 PURDUE UNIVERSITY, West Lafayette, IN.

Instructor to Assistant Professor; and, Coordinator, Programs for Disadvantaged Students

Undergraduate and graduate teaching, also developed and implemented recruitment and retention program for minority students in engineering. Courses taught in addition to those mentioned above: 1) Electronic Circuit Design and Analysis both Integrated and Discrete; 2) Semiconductor Devices and Circuit Models; 3) Introduction to Engineering; 4) Physics of Semiconductors; 5) Counselor/Tutorial (CT) Program.

Developed the following programs and activities as part of the disadvantaged students preparation for, recruitment into, and retention in the engineering program:

1. Designed, developed, and implemented the CT Program as part of the recruitment and retention programs for minority and/or other disadvantaged students in engineering at Purdue University. The CT program acclimated the selected students with the intricacies of technical disciplines. This was promoted through formal classes designed to supplement and complement conventional courses in Analytic Geometry, Calculus, Physics, Slide Rule, Graphics, and other technical courses as needed. Fall 1971
2. Co-Founder and Faculty Sponsor for the Purdue Society of Black Engineers. 1972 - 1975
3. Developer/Director of Minority Introduction to Engineering (MITE), 1974 through 1979.
4. Co-Founder and Faculty Sponsor National Society of Black Engineers. 1975 - 1980.
5. Co-PI/Director of Committee on Institutional Cooperation Plus Midwest Program for Minorities in Engineering (CIC+MPME). (This program is structured like MITE but serves eight graders rather than high school juniors.) 1976 through 1979.
6. Developed Top Five Sophomore (and Junior) Programs and Project Awareness as minority student recruiting tools.

NSBE Origins Timeline

1969 -1978

“The Architect of NSBE”

MEP/BSE/SBE/NSBE Founder

Arthur Bond, EE PhD Purdue University Faculty Years

PURDUE UNIVERSITY SECTION

THE SOCIETY OF BLACK ENGINEERS

Purdue Memorial Union Box 527
West Lafayette, Indiana 47907

EXECUTIVE COMMITTEE
1974–1975

PRESIDENT
Anthony Harris

VICE-PRESIDENT
John Logan

SECRETARY
Judy Nichols

TREASURER
Brian Harris

COMMITTEE CHAIRMEN

NEWSPAPER
George Smith

COURSE FILE
Rudolf Nichols

RESUME
Kevin Mason

GRAND PRIX
Stanley Pittman

PROJECTS
Brian Harris

TUTORIAL ASSISTANCE
Edward Coleman

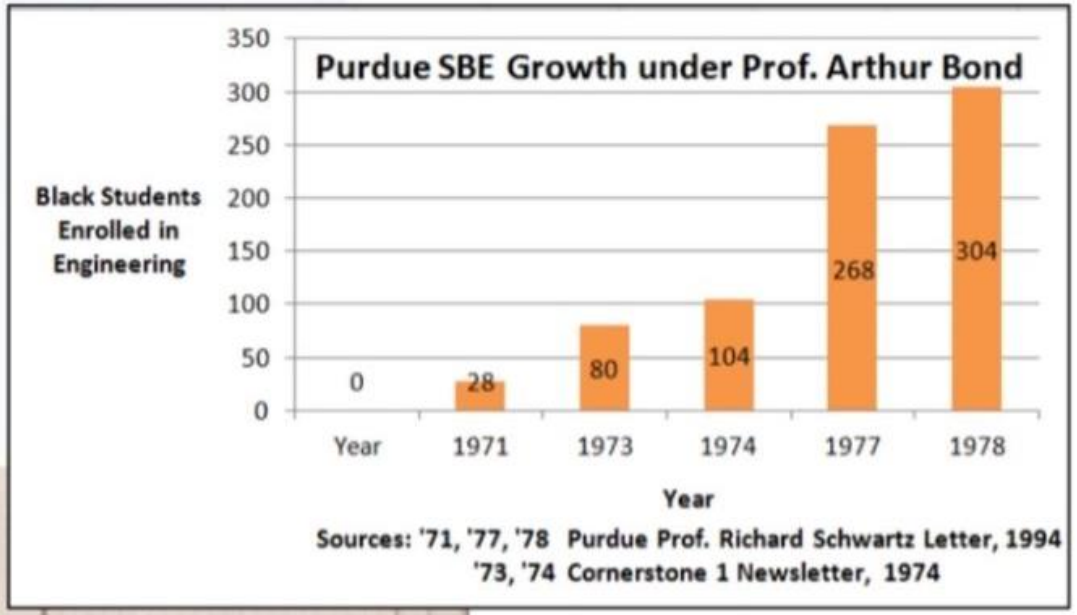
PUBLICITY
Allison Bond

MEMBERSHIP DEVELOPMENT
Melvin Dorsey

ADVISORS
Art Bond
Fred Cooper

FACT Committee Findings

F – Founding
A – Archive
C - Collection
T - Team



1974 photo of a Society of Black Engineers general meeting at Purdue University.
Standing Tony Harris, SBE President & John Logan, SBE Vice President
Source: First Cornerstone Newsletter

"DEDICATED TO A BETTER TOMORROW"

The FACT Committee is composed of NSBE Professionals who are dedicated to preserving and sharing documents and videos that define the history of the National Society of Black Engineers.

The FACT Committee has begun to chronicle the activities, events, leaders, and members who formed NSBE during the 1970's.

The FACT Committee will review documents and video content, verify authenticity, note significant findings, organize a storage and retrieval system, and provide a fact-based historical narrative.

Future generations of NSBE leaders, members, and supporters will have a benchmark to reference while assuring that we sustain our "DEDICATION TO A BETTER TOMORROW".

Lindblom Display at Illinois State Museum

Chicago, Cover Story, Education / September 10, 2018

Lindblom History Project Celebrates Famed School's Centennial

by David Smallwood

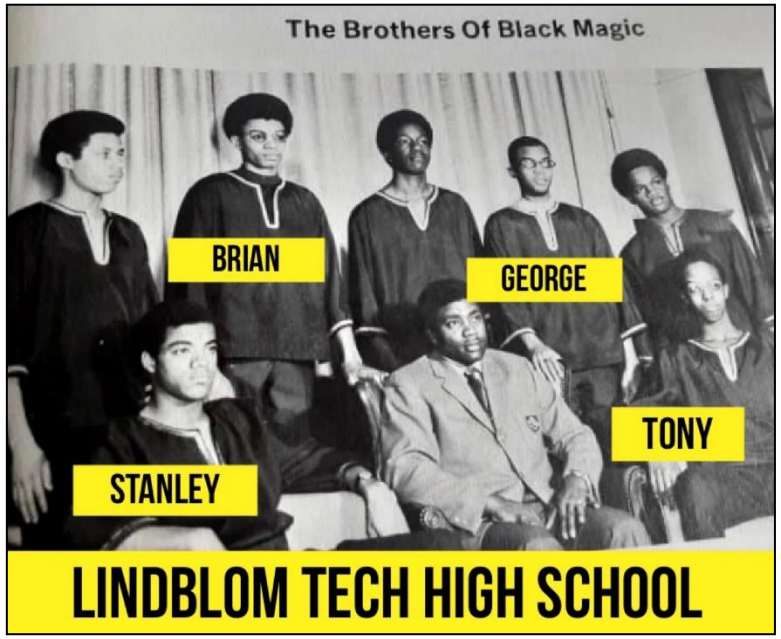
ANALYSIS, PERSPECTIVE, POLICY

Lindblom High: A South Side Success Story

by Andy Shaw — June 23, 2014

How did Lindblom Math and Science Academy become the top recipient of college scholarships in the district for five years in a row?

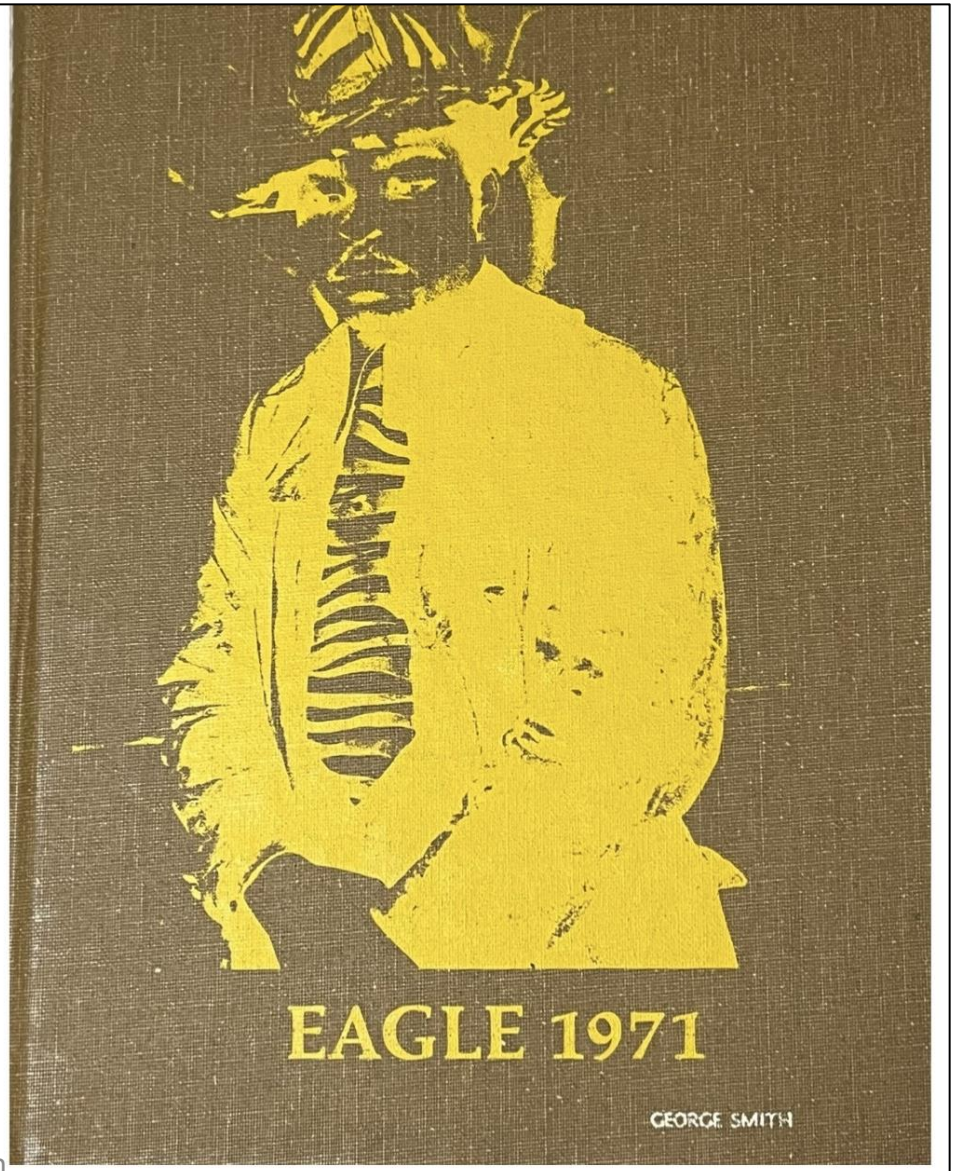
Lindblom Eagles



Lindblom Technical
High School Yearbook
Class of 1971
Home of the Eagles

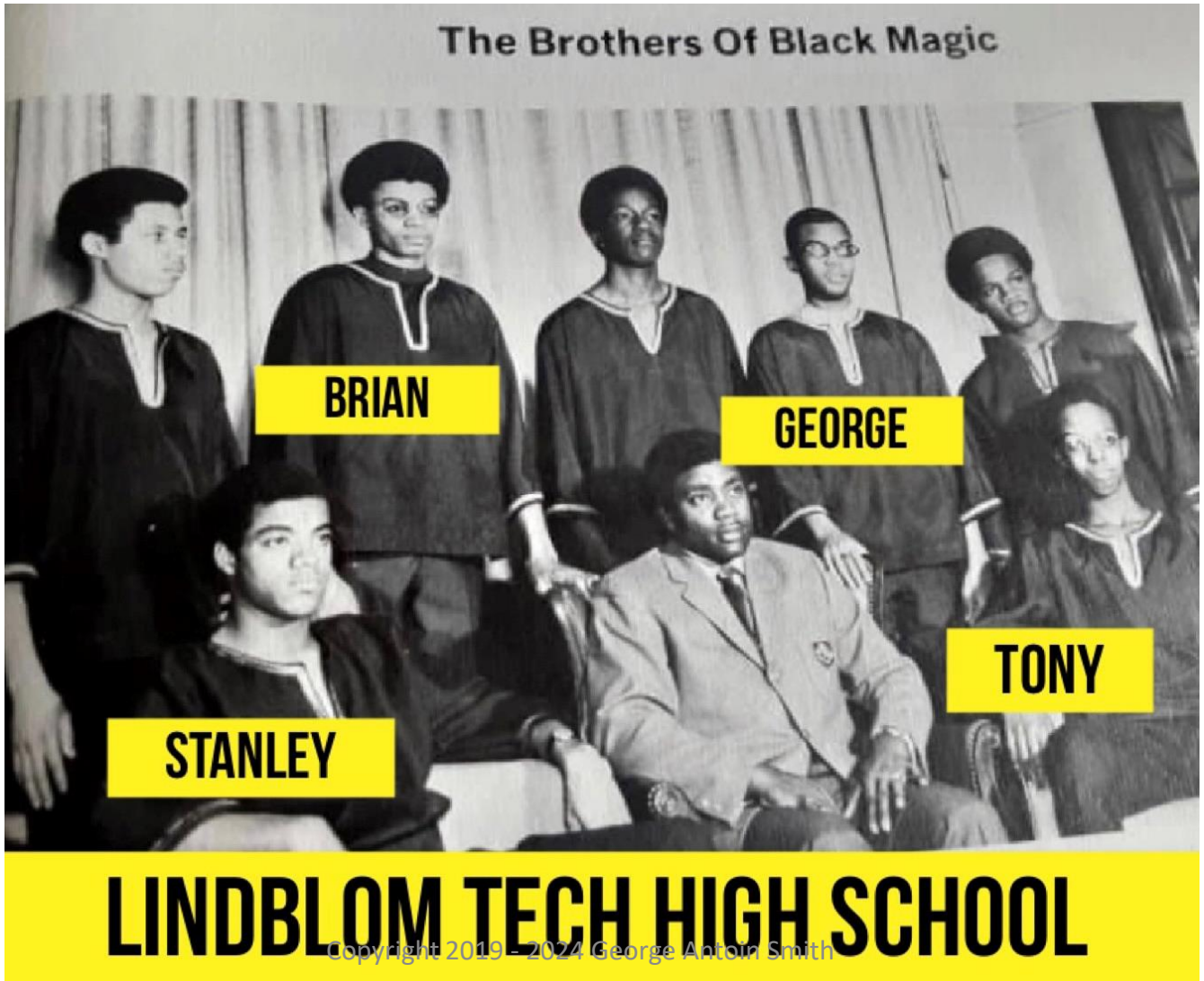
College Prep School
of NSBE's Chicago Six

Cover Model:
Carone Pierce



“The Click”

Four NSBE Founders first met on **Lindblom Technical High School’s Freshman Track Team**.
We became a Click and then came together as the Brothers of Black Magic Social Club.
We had 5 future Engineers including Vincent Brown (IIT) Alum between Brian & George.

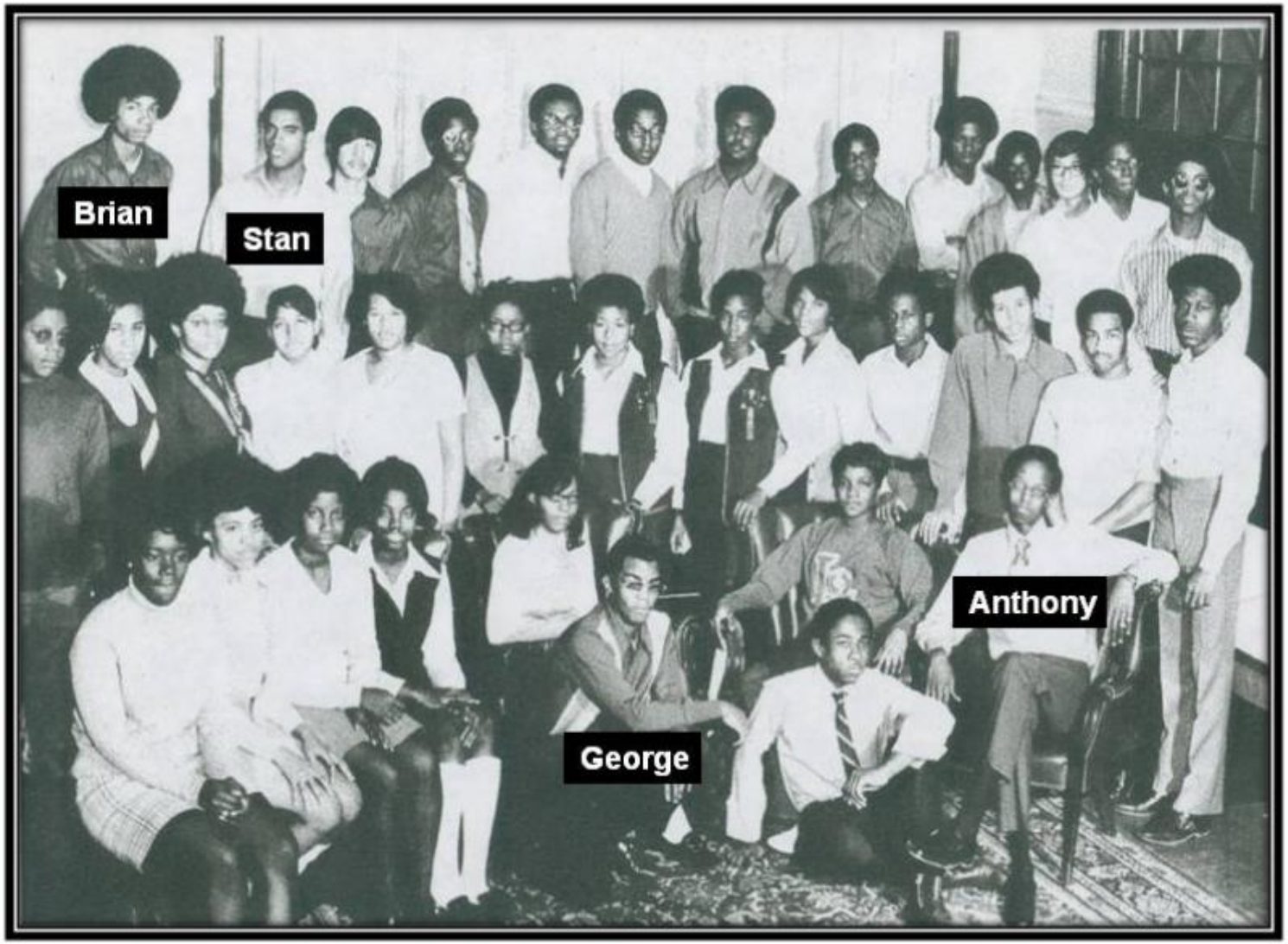


Chicago Public School System

Lindblom Technical High School

Junior Engineering Technical Society

J.E.T.S. – Junior Engineering Technical Society Lindblom High School 1970 - 1971



NSBE Founders Brian Harris, Stan Kirtley, George Smith, & Anthony Harris

Chapter 1. The Purdue University SBE Student Story

In 1971 Bond & Barnette Founded a New Society for Black Students in Engineering (BSE) at Purdue Univ.

Arthur Bond wrote the Constitution to guide our new student organization!

Arthur J. Bond
Electrical Engineering
PhD Candidate
BSE/SBE Faculty Advisor

Edward E. Barnette
Industrial Engineering
Senior
1st President of BSE

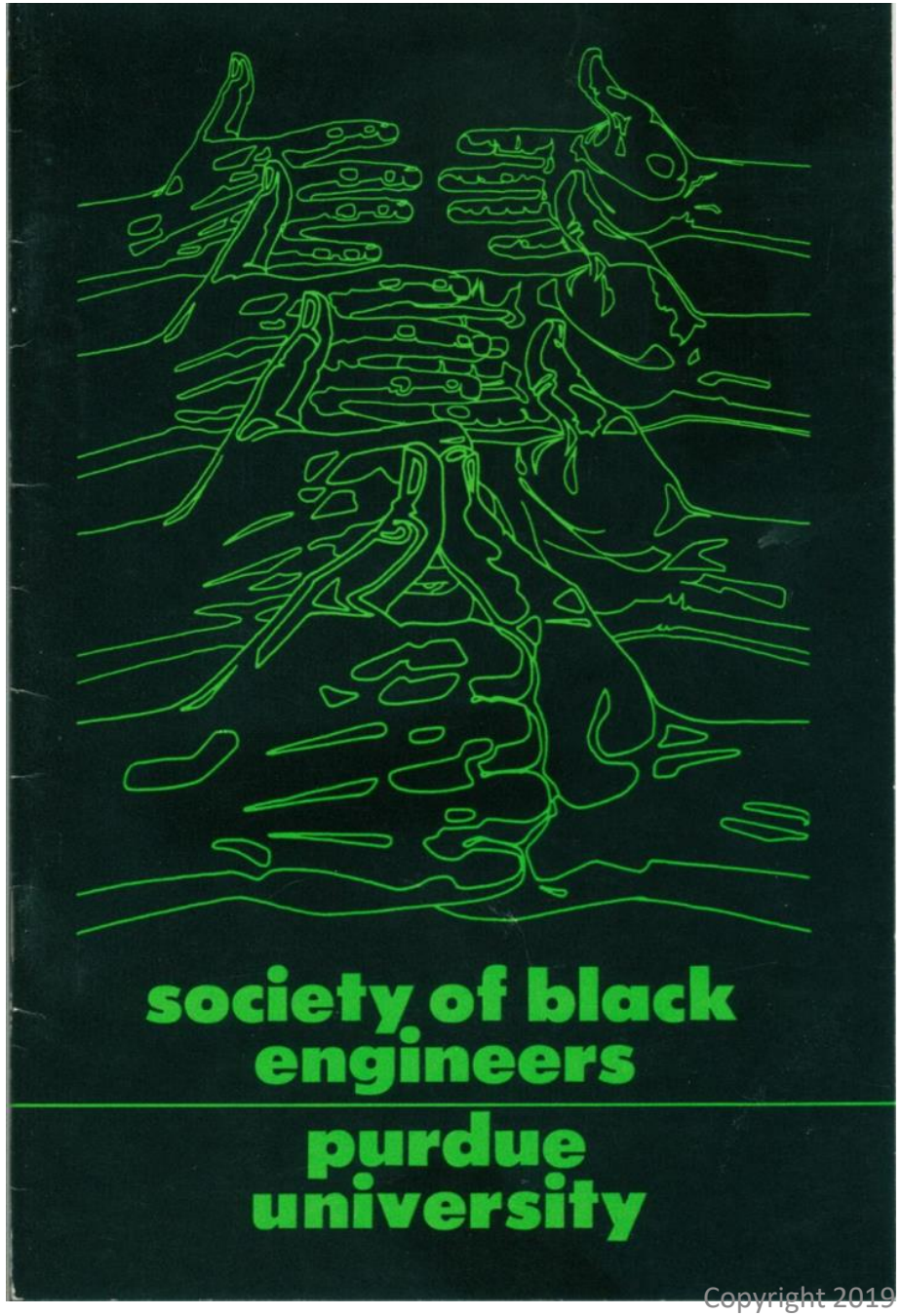
The BSE became SBE in 1973
The SBE became NSBE in 1975

The SBE Logo designer is George Smith

 https://www.facebook.com/DrArthurBondPage/

“The Crew”

John Logan, our Lindblom classmate, and Ed Coleman, my elementary school classmate, joined us. With them, the group who would later become known as the Chicago Six was complete!

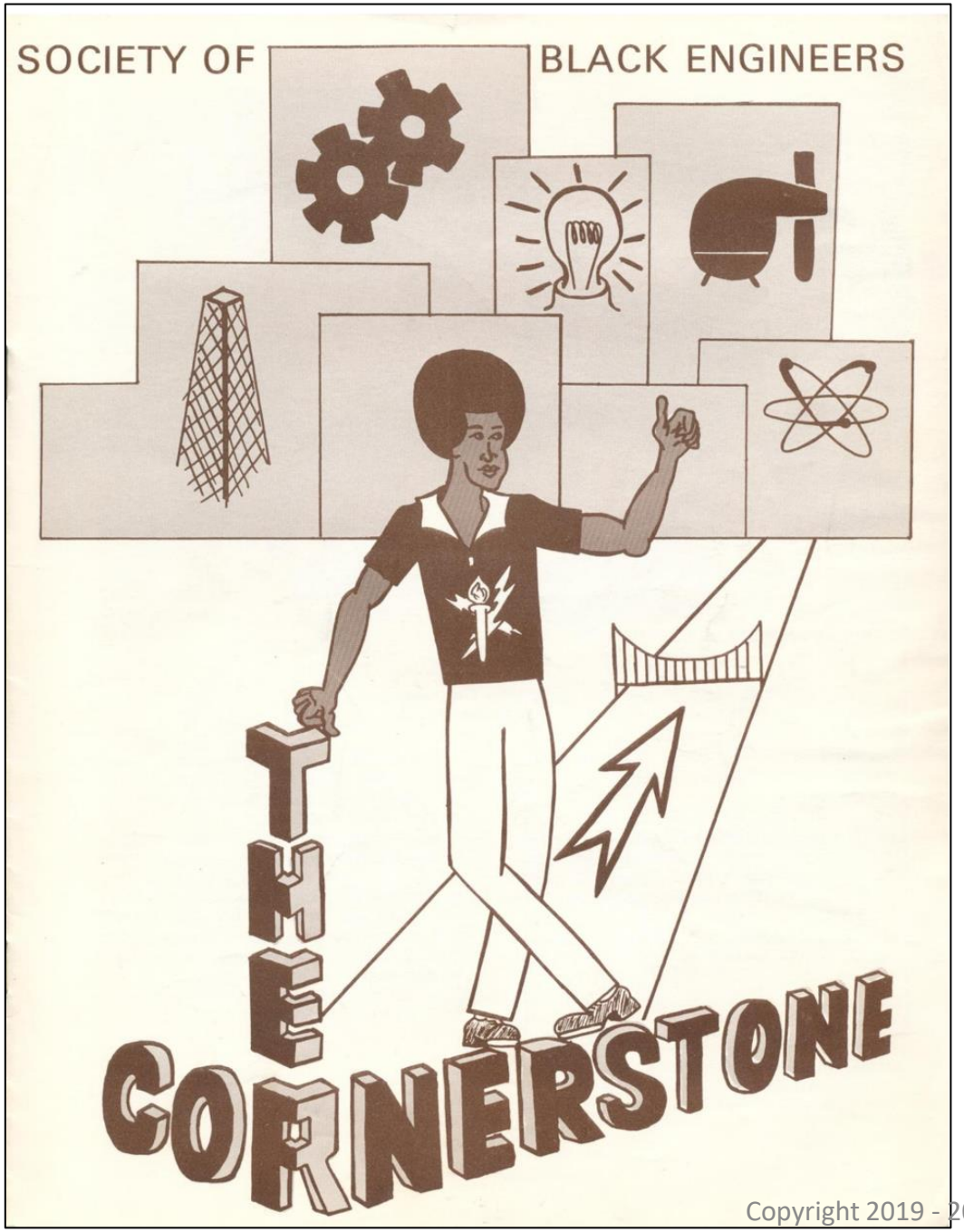


society of black engineers

purdue university

For further information contact:

Arthur J. Bond, Coordinator
Programs for Disadvantaged Students
Schools of Engineering
Engineering Administration Building
Purdue University
West Lafayette, Indiana 47907



Equal Opportunity Luncheon for High School Counselors hosted by the SBE and SWE.

Advisor Prof. Arthur Bond (left)

Advisor Saunie Tayor (right)

Equal Opportunity Luncheon
by George Smith

Purdue University has an interest in the development of minorities and females in engineering. On Thursday, October 24, the Society of Black Engineers and the Society of Women Engineers served as host and hostess to a luncheon which initiated an entire day of *Equal Opportunity in Engineering* programs for high school counselors. Guest speakers for the event were Professor Donna S. Frohreich, coordinator of programs for women in engineering, Ms. Janice Voss, a junior in engineering sciences, Mr. Anthony Harris, President of the Society of Black Engineers, and Professor Arthur Bond, coordinator of programs in engineering for minority students.

More involvement in programs of this nature should be stressed in the future.

SBE Representative Allison Bond (left)

SBE Representative Kevin Mason (right)

SBE Representative Ed Coleman (right)

Under Arthur Bond's Leadership, the Black Engineering Student Body increased by a Multiple of more than 10.

“Outstanding Student Leaders”

President Tony Harris and Vice President John Logan

Shown here skillfully leading one of our SBE general meetings.

Standing: (left) President Anthony Harris (ME) (right) Vice President John Logan (CE)

President Arthur Hansen addressed the audience of Corporate recruiters at Purdue's First Annual Corporate Banquet

THE CORNERSTONE

FIRST NATIONAL CONFERENCE

THE NATIONAL SOCIETY OF BLACK ENGINEERS

PURDUE UNIVERSITY CHAPTER

Equal Opportunity Luncheon 10-24-1974

First Annual Corporate Banquet 2-11-1975

First National SBE Conference 4-12-1975

Purdue MEP Director
Dr. Arthur J. Bond

Purdue President
Dr. Arthur Hansen

Equal Opportunity Luncheon
by George Smith

Purdue University has an interest i
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rograms for women in engineering
Voss, a junior in engineering
Anthony Harris, President of the
ck Engineers, and Professor Ar-
coordinator of programs in
minority students.

THIS BANQUET HAS MADE POSSIBLE THROUGH THE CONTRIBUTIONS OF THE FOLLOWING ORGANIZATIONS:

COMPANY OF AMERICA
PER PRODUCTS CORPORATION
DGE AND IRON COMPANY
F THE NAVY
ENT AND MATERIALS DEPARTMENT
L ALLISON
COMPANY
ECTRIC COMPANY
COMPONENTS DIVISION
EDUCATION SERVICES
DIVISION
RPORATION
COMPANY OF INDIANA
INESS MACHINES
T OF TRANSPORTATION
ATION
CONTROL SYSTEMS
COMPANY
INDIANA)
IFORNIA

THE CORNERSTONE

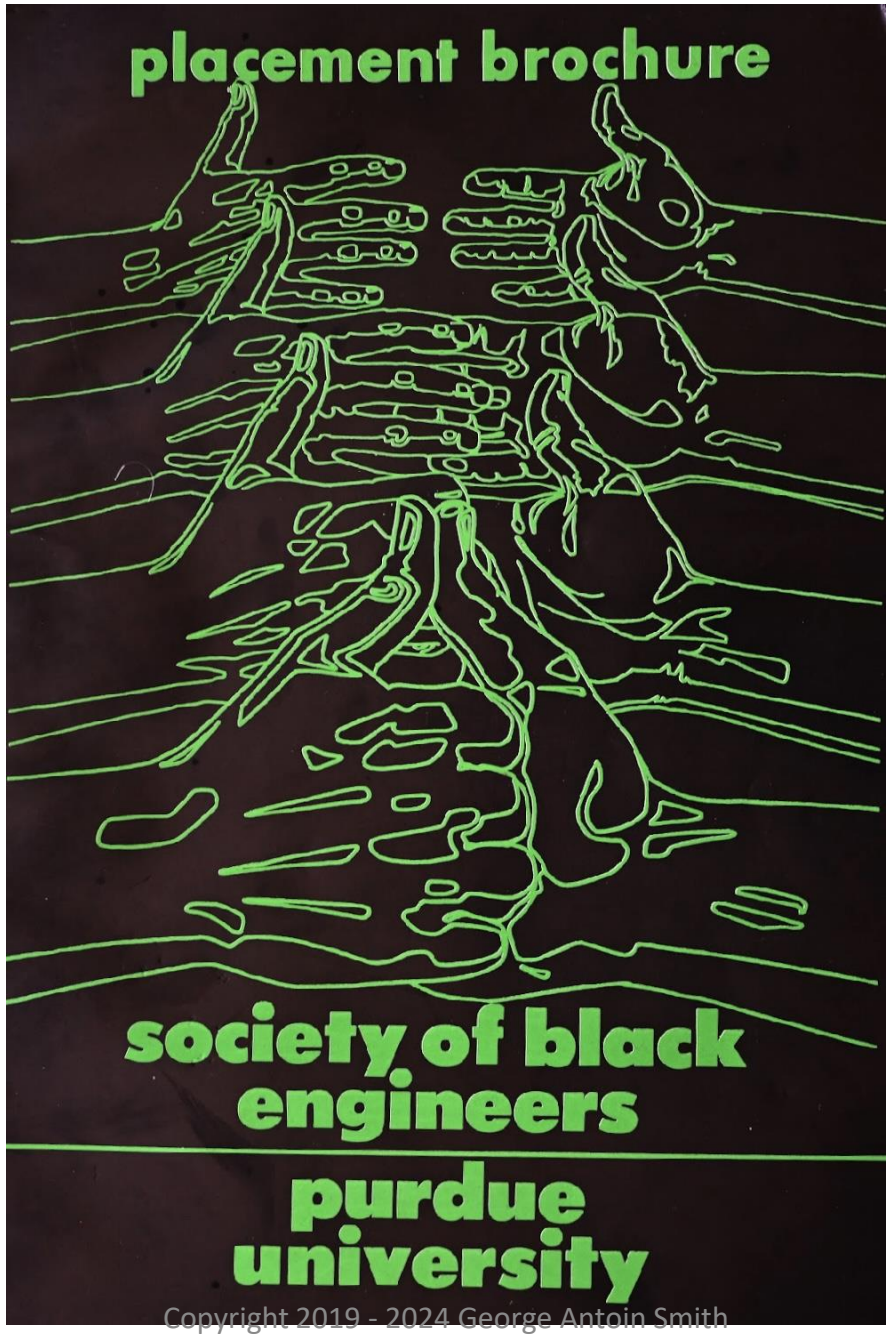
FIRST NATIONAL CONFERENCE

THE NATIONAL SOCIETY OF BLACK ENGINEERS
PURDUE UNIVERSITY CHAPTER

Outreach to High School Counselors

Outreach to Corporate Employers

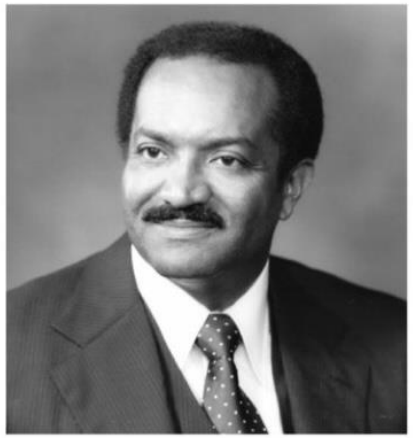
Outreach to Black Engineers Beyond Purdue



Chapter 2. The Purdue University Leadership Story

National Academy of Engineering

Purdue University



Percy Pierre

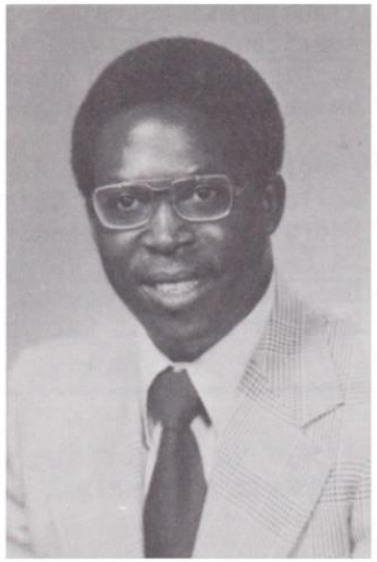
Arthur Bond convinced these companies to fund his Minority Engineering Programs at Purdue University

Pittsburg Plate & Glass

Inland Steel Corp.

https://www.facebook.com/DrArthurBondPage/

NSBE Origins
The Big Picture



Arthur Bond

Arthur Hansen

Corporate Sponsors

NSBE Chicago Six

What Happened?

1. Ed Barnette, Fred Cooper, & Arthur Bond organized Purdue's Black engineering students into the Black Society of Engineers.

2. The "modern- era" of minority engineering expansion began with a speech by J. Stanford Smith, General Electric Senior Vice President during the 1972 Engineering Education Conference held at the GE Crotonville Leadership Institute.

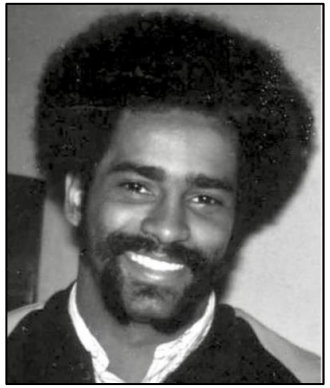
"We had a responsibility to (help) the underclassmen."

Edward Barnette, BSIE 1972
Manager of Manufacturing
Digital Equipment Corporation
Founder & 1st President of Black Society of Engineers at Purdue

1971 - 1972

Ed & Fred asked Art Bond to help them start Purdue's Black Society of Engineers. Art Bond became their Faculty Advisor and wrote the original Constitution.

Arthur Bond, PhD Candidate



"We wanted every student in engineering to graduate."

Frederick Cooper, BSEE 1974
Commercial Sales Consultant
Berkshire Hathaway
2nd President of BSE
1975 Detroit Lions NFL Draft Pick

PURDUE

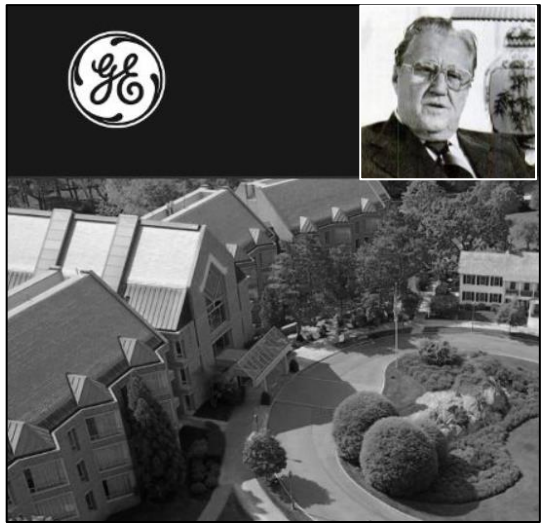
NSBE

MEP

Engineering Field Opening for Blacks
Black Enterprise, March 1973

"Little more than 470 Blacks graduated with bachelor degrees in engineering in 1972 … unless we can start producing not 400, but 4,000 minority engineers a year within the decade, industry will not be able to achieve its goals of equality, and the nation is going to face social problems of unmanageable dimensions."

J. Stanford Smith
Sr. VP, General Electric (1972)
CEO, International Paper (1973)
Board Chairman, National Fund for Minority Engineering Students (1977)



1972 Engineering Education Conference
GE Management Development Institute
Crotonville Corporate Campus, New York

Impacts of the 70's and 80's

"The Crotonville speech began conversations that impacted private and public policy. Lindon Saline, Director of the GE Management Development Institute enlisted participation of Percy Pierre who attended the Crotonville Conference as the Dean of Engineering at Howard University.
This pair persuaded the Commission on Education of the National Academy of Engineering to host a Symposium on Minorities in Engineering and pulled financial sponsors including the Sloan Foundation.

C. Weinberg, Dept of Economics
Univ of California, Santa Barbara

Lindon Saline
Dir Corp Education
GE Management Development Institute

Irene Sharpe (SWE)
Electrical Engineer
U.S. Government

On Nov. 30, 1972, Dr. Pierre addressed the Engineering Manpower Commission of the Engineers Joint Council.

Dr. Percy Pierre
Johns Hopkins Univ, Ph.D., E.E. 1967
Howard U. Dean Engineering (1971–77)
Prog Officer Sloan Foundation (1973–75)
Committee On Minorities in Engineering
Vice Chairman (1974-1978)
Assist. Sec. US Army, Research (1977–81)
Pres. Prairie View A&M Univ. (1983–89)

1969 - 1971

What Happened?

80% of Purdue's Black freshman engineering students struggled academically and changed majors. A solution was needed. Former Dean of Engineering Dr. Hawkins asked Arthur Bond to help. The programs Bond put in place turned failure into success for the 1971 Freshman Class and beyond. 24 of 28 (85%) Blacks enrolled in 1971 earned Purdue Engineering degrees by 1976.

Purdue Black Cultural Center

1971

Art Bond's Resume describes the suite of MEP programs he designed to recruit & retain Black freshmen engineering students.

- Counselor Tutorial Program
- Top Five H.S. Junior Program
- Minority Intro To Engineering (MITE)
  - Purdue University
  - Midwest Expansion Effort
  - National Expansion Effort

His retention impact was immediate, 80% of the 1971-1972 Black freshmen engineering class succeeded. His recruitment effort increased Black engineering enrollment from 28 in 1971 to 104 by 1974 and to 304 by 1978.

PURDUE

NSBE

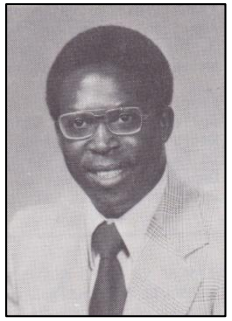
NAE/MEP

Arthur J. Bond, PhD EE 1974
BSEE 1968, MSEE 1969

1969 - 1971

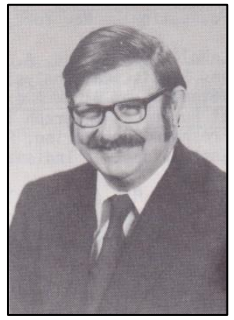
Veteran U.S. Army Signal Corps Radio Relay Team Chief, Arthur Bond, was recruited by Dr. George Hawkins, the Dean Emeritus of the Schools of Engineering to:

- pursue a PhD in electrical engineering,
- join the engineering faculty,
- help plan a new Black Cultural Center (BCC), &
- create Purdue's Minority Engineering Program (MEP).



"Many of my students had come from an all-Black environment and needed a place where they could interface with other Blacks to relax and talk about how to accomplish their common goals."

Arthur "Art" Bond
Professor of Engineering
Purdue University (1969 – 1979)



"Art organized the first MITE programs at Purdue which became the foundation for many of Purdue's later pre-college endeavors."

William "Bill" LeBold
Professor of Engineering
Purdue University (1962 – 2002)

"In 1969, Bond was appointed as the first Coordinator for the Program for Disadvantaged Students (MEP) in the Dept of Freshman Engineering at Purdue."

Richard "Dick" Schwartz
Dean of Engineering
Purdue University (1964 – 2000)

Chapter 3. The American Corporate Allies Story

Interview of
J. Stanford Smith,
General Electric
Senior Vice President,
Black Enterprise Magazine,
March 1973

“unless we can start producing not 400, but 4,000 to 6,000 minority engineers a year within the decade, industry will not be able to achieve its goals of equality, and the nation is going to face social problems of unmanageable dimensions.”

GE senior vice president J. Stanford Smith

Engineering field opening for blacks in midst of job revival

According to the Department of Labor, at least 48,000 new engineering graduates will be needed each year for the rest of the decade. But the Engineers Joint Council, a New York-based federation of engineering groups, reports that only about 43,000 bachelor's degrees in engineering were earned in 1972 and the same number in 1971. And declining enrollments lead the Council to estimate that there will only be about 32,000 engineering graduates in 1975.

Traditionally, blacks have not entered technical disciplines in any great numbers, and this holds true of engineering. Little more than 470 blacks graduated with bachelor's degrees in engineering in 1972 and about the same number graduated in 1971. In 1970, blacks numbered only one out of every hundred of the 230,000 students then enrolled in engineering, and 70 per cent of those black students were enrolled in predominantly black schools.

Despite the restricted job opportunities experienced by engineers over the last few years, the present employment outlook indicates intense recruitment of available talent. This year, needs for engineers in the aerospace industry, highly contradictory to recent hiring trends, are expected to increase by 61 per cent (though many hires will be among those previously laid off by this employment sector), while hiring in metals and chemicals is predicted to go up by 52 and 38 per cent, respectively.

In a speech last summer at the Engineering Education Conference, J. Stanford Smith, senior vice president of General Electric Company, made a strong call for increased minority enrollment in engineering schools. "To put the challenge bluntly," he said, "unless we can start producing not 400, but 4,000 to 6,000 minority engineers a year within the decade, industry will not be able to achieve its goals of equality, and the nation is going to face social problems of unmanageable dimensions." In that same speech, Smith advanced that minority hiring in engineering is presently more a question of supply than opportunity. "The doors are open and the channels of upward mobility have been cleared," he said. "Now it is truly a problem of supply."

Interviewed recently, Smith said that he expects the need for engineers to remain strong for quite some time, and that all kinds of engineers are in demand. "There is a need for the full range of engineers," he said. "Today, there is more emphasis on engineering as a career, and less marked differentiation between the types of engineering. For instance, General Electric hires more mechanical engineers than electrical engineers." And it seems that Smith's company is also highly involved in proving the truth of his words about job opportunities for blacks in engineering. "We at General Electric hired better than 100 minority engineers last year," he said, "and we can presently use about five times that number."

Of course, what must be considered in this encouraging prospectus is how many available jobs will be above entry-level, and how many will be in legitimate line managerial positions. If corporations can move concretely towards offering such opportunities, then engineering should be high on the list of considered majors among black students. □

National Academy of Engineering Symposium Agenda

May 6 – 8, 1973
Washington, D.C.

Goal: 10 X Increase in Minorities:

- Black-Americans
- Puerto Rican-Americans
- Mexican-Americans
- Native Americans

Recommendations:

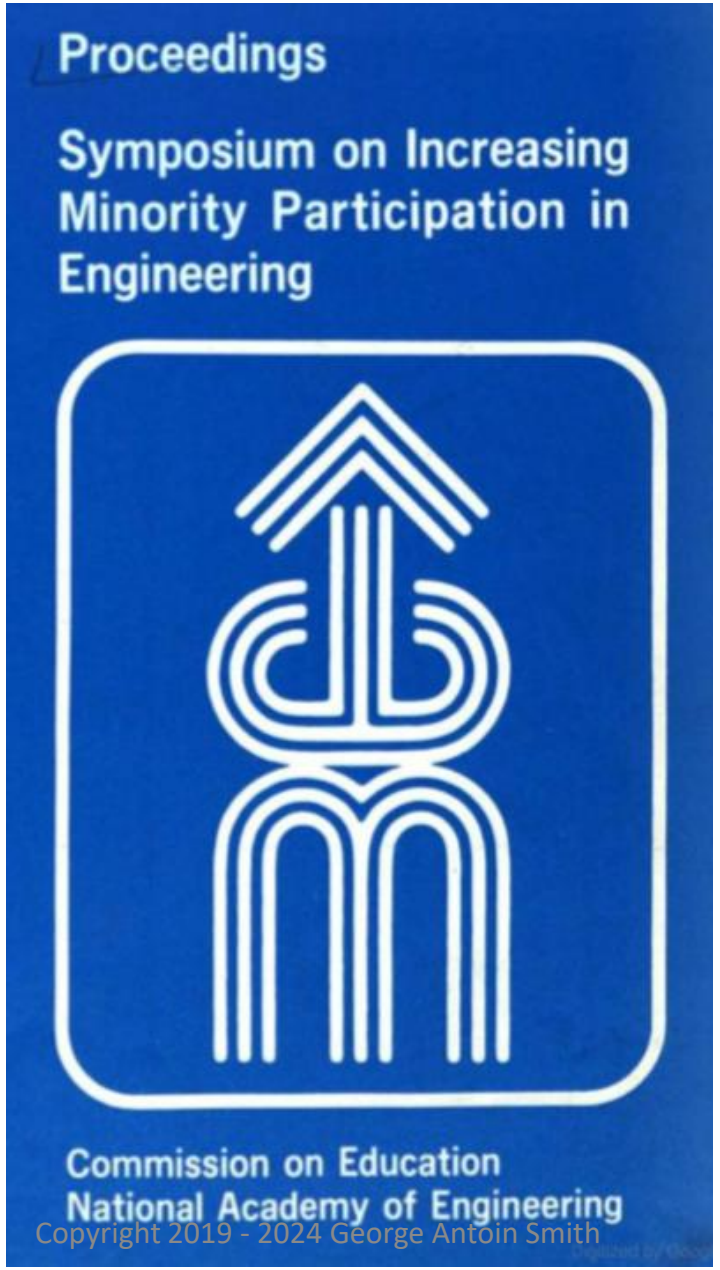
- Recruiting
- In-College Support
- Minority Engineering Program Financing

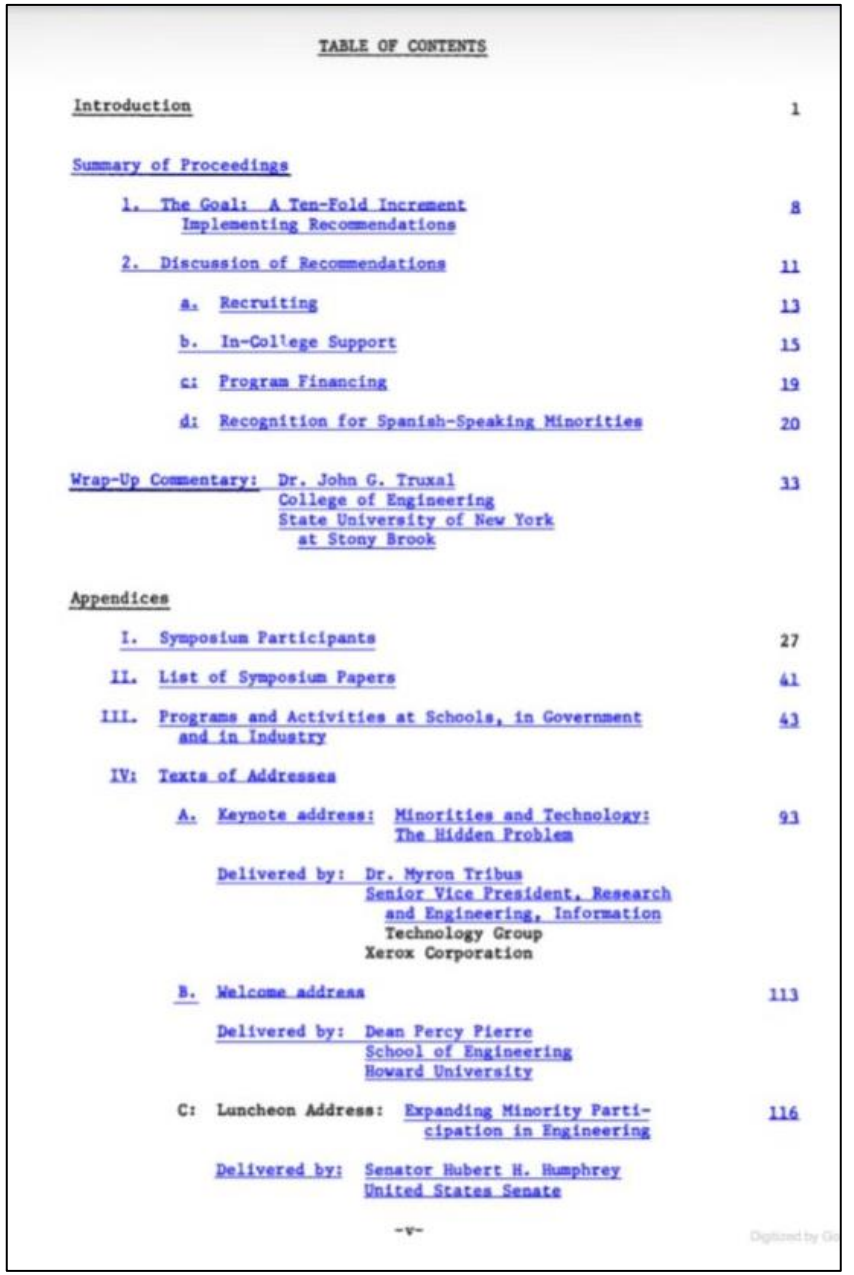
Programs: Schools, Govt, & Industry

Keynote Speakers:

- Dean Percy Pierre, Howard University
- US Senator Hubert Humphrey
- Dr. Myron Tribus, Sr VP Xerox Corp
- Dr John Truxal, State Univ of NY, S.B.

* Art Bond, Purdue PhD Candidate Attended





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Vice President-elect Humphrey alongside Coretta Scott King and civil rights leader Dr. Martin Luther King Jr. in 1964.

On May 29, 1973

Hubert Humphrey's speech from the May 6 – 8, 1973 **Symposium on Increasing Minority Participation in Engineering** was published in the United States Congressional Record.

Hubert Humphrey, U.S. Senator
Former U.S. Vice President

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APPENDIX IV - PART C

ADDRESS BY SENATOR HUBERT H. HUMPHREY AS ENTERED INTO THE *CONGRESSIONAL RECORD*

United States of America

Congressional Record

PROCEEDINGS AND DEBATES OF THE 93d CONGRESS, FIRST SESSION

Vol. 119 WASHINGTON, TUESDAY, MAY 29, 1973 *No. 80*

Senate

S 9770

EXPANDING MINORITY PARTICIPATION IN ENGINEERING

Mr. HUMPHREY. Mr. President, on May 7, I addressed a special National Academy of Engineering symposium on minorities in engineering. I think that when we look at the poor national performance in promoting minorities to top professional leadership positions, we must look to a totally inadequate minority participation in engineering as an important part of the problem.

Given the predicted shortage of many categories of engineers in the next few years, it would be irresponsible if a serious effort were not made to fill a good portion of this gap with talented people from our minority groups.

I believe that the prime second generation civil rights problem of the 1970's is the slow progress of minorities into top levels of management. If we can produce more minority engineers in the 1970's, we will have a "seedbed" of talent for top level management positions in the 1980's and beyond.

I ask unanimous consent that my remarks to the National Academy of Engineering on May 7 be printed in the RECORD.

There being no objection, the address was ordered to be printed in the RECORD, as follows:

EXPANDING MINORITY PARTICIPATION IN ENGINEERING

America has made great progress in the civil rights area in the last decade. The most dramatic and important achievement has been related to jobs. Without an equal opportunity for decent jobs and income, I think we will all agree, there is little chance for full participation in other areas of society.

In one area, however, minority progress has been relatively slow. That is in the upper professional and managerial ranks. This, I believe, is the prime second generation civil rights problem of the 1970s. Unless it is addressed, inequality in our society will grow.

Engineering training has traditionally been and is today a key requirement for many of the upper level professional and managerial positions to be found in businesses and government. The current participation rate of minorities in the engineering field, however, is shamefully and distressingly inadequate:

96% of U.S. engineers are white males, a group which comprises only 42% of our population.

A group of 36 million Americans—blacks, Indians, Chicanos and Asians—contribute less than 2% of the U.S. scientific and technical personnel.

Women represent less than 1% of engineers.

Of 1.1 million engineers in 1971, only 7,300, or .7%, were black.

Out of 230,000 students enrolled in Engineering in 1970, only 1 out of 100 were black.

According to the experts, this country is headed for a severe shortage of engineers in many specialties within the next few years. If the quality of life for a growing population in an increasingly complex world is to be improved, this gap must be filled. This could be done in a number of ways. However, it would really be irresponsible, with this timely gap in the supply of engineers, if we failed to fill a large part of it with minorities and women. We must!

Of course, this will not happen on its own. A massive concerted effort by industry, government and our educational community is called for.

Why should we try to meet the anticipated demand with minorities? Some of the most important reasons are:

To reduce economic discrimination and provide potential managerial and professional leaders in the future from our minority groups. It takes 15 to 20 years to rise to top positions; we must not waste time.

To tap a valuable source of human capital that has not been fully utilized in the past, particularly in engineering and the hard sciences.

To provide a cadre of technically trained minority people to help find technological solutions to the socio-economic problems of the central cities, where many of these people have their roots.

To prevent the recurrence of a "brain drain" of engineers from foreign countries where their skills are urgently needed. And

To increase the number of non-white Americans available to respond to the technology needs of the third world.

Most agree that the problem of getting more minority engineers into industry, education and government is a supply problem, not one of demand. While equal opportunity legislation has succeeded in inducing demand, it is not being met by the educational establishment.

A number of related problems have been pointed to as the reason for the lack of trained minority engineers in the U.S. Some of the most important seem to me to be:

Inadequate preparation for engineering schools by inner city public schools (poor facilities, especially for sciences, poor curricula in math and science, insufficient guidance counseling, etc.).

Minorities have been generally unaware of opportunities in the engineering profession.

All too few successful engineering leaders from the minority community to serve as models for the careers of the young.

The economic condition of most minorities makes any advanced education difficult to obtain. When that education requires longer hours in school for laboratory work—making outside employment difficult to arrange—this economic problem is compounded.

The community colleges and predominately black institutions that most minorities attend have generally not been adequately funded to provide quality engineering education.

Another serious related problem is the lack of technically trained minorities at the top managerial and professional levels of industry, government and education. Besides the obvious reason that there is only a limited pool of lower level minority engineers in these organizations to put into the leadership positions, other reasons have been noted. Some of these are:

Rigidities in the promotional and seniority systems of public and private sector organizations;

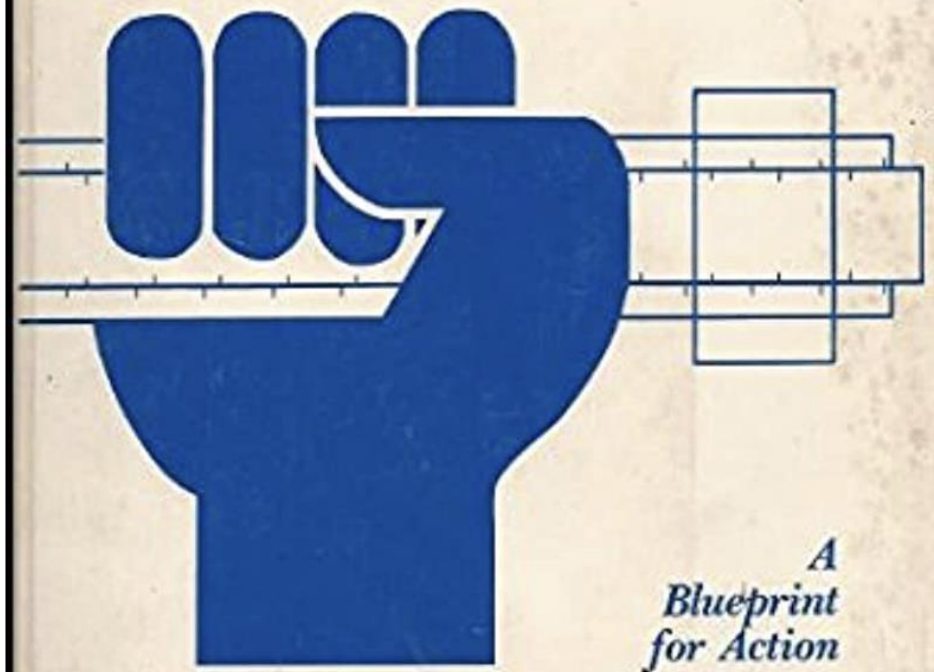
Small number of the minority engineers with educational backgrounds that can compete with their peers who attended the U.S. "centers of excellence" in engineering. And

The persistence of bias in most organizations at many levels, despite the official policies of these institutions.

Now, what can be done to correct this situation, to improve the supply of minority engineers and see to it that they are given fair treatment in moving up in our private and public institutions?

R-E-H

MINORITIES IN ENGINEERING



A Blueprint for Action

A report of the Planning Commission for Expanding Minority Opportunities in Engineering

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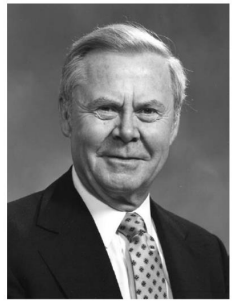

Archie D. Hansen

Committee on Minorities in Engineering
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National Academy of Sciences, University of Engineering

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For Engineers, the Future Is Now

An Interview with J. Stanford Smith, Chairman of the Board, International Paper Co.

J. Stanford Smith is Chairman and Chief Executive Officer of International Paper Company (IPC), the world's largest maker of pulp, paper and paperboard products and North America's largest private owner of forest lands. Last year the company recorded net sales of $3.54 billion. Mr. Smith joined IPC in 1973, after resigning as Senior Vice President of General Electric, where he had been employed for 37 years. Included among the many directorships and positions he holds is that of Chairman, Board of Trustees, The National Fund For Minority Engineering Students.

BE: What are the short term and long range goals of the National fund?

SMITH: First of all, I don't think our subject is the National Fund for Minority Engineering. The subject is much broader. It's how do we help get minorities assured their full place in American business life. The fund is just one tool out of many that helps assure that. Now having said the overall concern is to help minorities get their full place in American business, let me make it more specific and say the question is how do we get minorities into top positions in American industry, in professional life and in managerial life—positions of leadership in the professions and in management in American industry? When you ask that question, you implicitly ask, what are the surest routes to success in American industry? And you come up with two basic

approaches: one is accounting and finance; and the other is engineering, particularly in the technology industries. Those are the industries that are growing fastest in the United States, and in which the United States has the strongest world leadership position. Therefore, engineering is the surest route to the top. When you look at companies like General Electric, Dupont, Hewlett Packard to use examples, or Texas Instrument, the chances are that about 60 percent of their top management will have come from the engineering profession. It's inevitable that if you're going to have a good representation of minorities in management, you've got to have a goodly number of minority engineers. So this is where the National Fund program starts. When we started the program in 1972, less than one percent of the engineering graduates were black and only about one-half percent were minorities. There were about 40,000 engineers graduated in 1971, and only 4,400 of them were black. That meant as those graduates moved through the ranks of American industry, you were not going to get a high percentage of professional leadership and managerial leadership, because 60 percent of the management in high technology industries were drawn from the engineering profession. It is crucial that we have more minority engineers. That's the whole idea of the program. We have embarked upon a 10 or 20 or 30 year adventure, so that you will really be able to achieve parity in the American industrial community. Now, that's a particularly difficult problem, because we found a very high percentage of minorities going into teaching, social work, and insurance. Those are the traditional professional occupations for minorities. So we said, let's concentrate on how this could be done for engineers. A student has to decide in junior high school that he's going to be an engineer. Then he has to take mathematics, physics and chemistry in high school, along with the conventional subjects that will equip

Interview of J. Stanford Smith, CEO of International Paper, Black Enterprise Magazine, May 1977

J. Stanford Smith

him to enter engineering school. Now, to do that, you have to convince the guidance counselors in the United States that there's a big opportunity for minorities in engineering.

There aren't many engineering models in the minority community. In general, unless special effort is made, youngsters who don't grow up in technical-oriented or industrial-oriented homes, don't aim toward engineering as a career. If they don't aim towards engineering, starting almost in their freshman year in high school, it's awfully hard for them to come out at the other end of the funnel 20 years later as an industrial manager. That's the whole concept of the program.

BE: How do you propose starting off?

SMITH: We tried to get an alliance of the top businessmen and the top engineering schools. We hoped the businessmen would thoroughly convince the engineering schools that they were searching for this kind of program and that they would help support it. Then, we formed the National Advisory Council for Minority Engineering (NACME). Greg Jones, head of General Electric, first headed the council. General Electric spent a whale of a lot of good money and did a lot of good work on exhibits that toured black communities, Spanish-speaking, minority communities and so on, to show what an engineering career can be. They did work with guidance counselors so that guidance counselors would not say to a black student, "Oh you shouldn't aspire to that. You should be satisfied doing this, that or the other thing." GE did a lot of work advertising in high schools and junior high schools. In the meantime, NACME got engineering schools to participate in the program, so they would be recruiting in an environment.

Then we approached the Sloan Foundation to make a study of the need for engineers, and it came up with exactly the same findings. But it did add one more dimension: A national fund was needed to make it very evident to minority students who wanted to go into engineering, that the dollars were available for scholarships. As you know, there are already a lot of scholarships available at schools for minorities. There are also a lot of scholarships that go unused. But despite that, you do need both the dollar assistance of a major fund and evidence for the student, the high school guidance counselors, the colleges and the engineering colleges that money is available. So we set up the National Fund for Minority Engineering (NFME). Its participants include a long list of major companies in the United States, who have pledged to contribute from hundreds of dollars, to International Business Machines which has pledged over a million dollars.

BE: Over a period of time, not in a year.

SMITH: Right. International Business Machines has already contributed $125,000 and they've pledged a million dollars more over the next five years, $200,000 a year. The Sloan Foundation has given $800,000. General Electric has given or pledged more than $550,000. International Paper which is a much

"Engineering students tend to come from the families of artisans and blue collar workers."

smaller company has pledged $100,000 for this year and we've already given $300,000. Dupont has pledged $150,000 for next year. It reads like the roster of American industry: Exxon, Bethlehem Steel, American Telephone and Telegraph, General Motors, International Paper, United Technology Corporation, Union Carbide, Ford Motor, General Telephone and Electronics. David & Lucillle Packard Foundation . . . that's Hewlett Packard, Westinghouse, Alocoa, Atlantic Richfield, DuPont, RCA, United States Steel, Allied Chemical, Gulf Oil, International Harvester, Mobil. We've got very good representation from American industry and they're backing this. We've had the active participation of the deans of the engineering schools. Art Hanson of Purdue played a very prominent role in this as did Percy Pierre, dean of Howard University, one of the black-oriented engineering schools. We've told universities and engineering schools that scholarship funds are available not only for adding minority students over and beyond what you already have, but for those that you have the financial resources to attract from other sources. So the NFME has had a multiplier effect.

BE: What is the bottom line of that effect for the minority students?

SMITH: It pays off about four times as much than if a company just gives its own funds.

BE: What seem to be the major obstacles to recruiting black engineering students?

SMITH: First of all, social studies have shown that engineering students, more than anyone else, tend to come from the families of artisans, farmers, successful blue collar workers and highly skilled craftsmen. Now, if you think about it, minorities have their own mental image of what they'll be when they grow up—which, generally leads them into areas of social service, government work, teaching or being a blue collar laborer, for example. That's their mental image. So the first problem is the mental image that the student has of himself. The second problem is that much as we deplore the fact, we must admit that many blacks and other minorities have not been in the best public school system. They've sometimes been in school systems where they've been allowed to get by, you might say. You have to be a good student to be an engineer. You can't be in engineering and be a poor student. You must have learned to accept the tough discipline of mathematics, physics, chemistry and English before going on to more specific engineering subjects such as thermo dynamics, computer science, and so on; and those are tough mental disciplines. I'm in no sense suggesting that minorities are not as capable as whites—they are—but I am suggesting that their education has often not prepared them too well for a career in engineering. The third factor is that many times, and this ties in with the quality of schooling, the counseling given the minority youngster does not help him to aspire as high as he ought to aspire. Many counselors would strongly object to my saying that, and I expect I will get letters from people saying I'm wrong, if this is put in your article; and I hope I am, but I think there's some truth in this. The fourth problem is that there are not enough role models. Minorities don't have fathers or uncles, who are engineers. They don't have elder brothers who went into engineering and they don't know friends who graduated five years ago as engineers. So we're trying to get more and more role models. Then, when and if we get more role models, we hope to encourage them to go back to the schools and talk, advise and counsel students. Next, the engineering schools themselves were having a period of adjustment after

J. Stanford Smith

the space program. Consequently, during that period they also had to be courageous and increase their recruitment of students—who often needed some remedial work to be successful. Now, it should be emphasized, there has been no problem whatever of getting jobs in American industry for graduating minority engineers. That is not the problem.

BE: There previously was a drive in American industry to get engineers. It began in the '50s and was followed by the '60's boom in the space industry. Then the aerospace industry experienced economic difficulties as the hectic activity of the space program visibly showed.

SMITH: That was the period of readjustment in engineering I mentioned earlier.

BE: But as a result of those occurrences, there was a massive layoff of engineers.

SMITH: That is what you call "conventional wisdom." Most of what happened occurred in concentrated areas such as certain places on the West Coast . . .

BE: And on Long Island, where there were severe layoffs.

SMITH: You are right. It did not occur nationally. In general, and during that period, I don't know of a single minority engineer—who was any good—who went looking for a job. Now what that period did was shake out the marginal engineers and, we all must admit, there are marginal engineers just as there are marginal accountants and marginal journalists and marginal people of all kinds in all of industry.

BE: Right, but the question I wanted to ask was, now that there's a similar undertaking by American industry to get increased numbers of black engineers, what guarantees are there, or can there be, to a black who will devote 10 to 20 years of his life, that he, too, won't find himself unemployed at the end of that time along with masses of other black engineers?

SMITH: Well, I don't think that anything in life is guaranteed. But the better equipped you are professionally, the greater the certainty that regardless of how the world changes, you'll be able to adapt to it, to new circumstances. This is particularly true for, in my opinion, the foreseeable future. By forseeable, I am talking about 20 or 30 years. Because of American industry's drive to get parity in engineering, the professions and management, there's going to be a big demand for minorities who have really developed professional proficiencies. And that's true whether it's professional proficiency in accounting, or in engineering or in management. Of course, many of the engineers will move on in all kinds of management and into a wide variety of jobs that's hard to predict. For example, you take McGraw Hill. They're big publishers, but I think you'll find that a majority of its top editorial posts are held by engineers. Also, it may surprise you to know that at *Business Week*, the top three or four people are all engineers.

BE: Is that attributable to engineering or is that a comment on *Business Week?*

SMITH: Well, I think *Business Week* is a very good publication.

BE: Yes, it is, but if engineering is so desirable as a career, why would engineers choose to become editors?

"Hopefully, more minority engineers can serve as role models."

SMITH: But you see, they don't. Your question reveals another problem. I started out in finance. I didn't leave finance. I used finance as a foundation on which I built marketing and general management. I've done almost every kind of work in American industry—and engineering has provided the foundation by which so many people answered American industry's request to do all kinds of things. Now, the average person's idea of an engineer in industry is one of an individual who works at a drawing board and designs products. I would guess that less than five percent of the engineers in American industry do that kind of work. Now, I'm guessing more in some companies than in others, but the top sales people in most industrial companies are engineers. If you want to sell jet engines for United Aircraft or General Electric, you have to be an engineer. If you sell nuclear power plants, you're an engineer. Turbines, motors, locomotives, all Ingersol Rand pneumatic equipment, all the Dupont material, are sold by chemical engineers. It's a marvelous foundation and that's the reason I commented on *Business Week*. It's a marvelous foundation on which the editor of *Business Week* (who is, incidentally, a Purdue engineering graduate) could build. And he sees American industry from the vantage point of having worked in it and through it. Also, two of his chief assistants are women engineers who worked in industry before going into publishing. So engineering provides a very broad background. You know, you asked me before what are the obstacles. Maybe one is an inadequate concept of what an engineer is. This too, could be part of the problem.

BE: Returning to obstacles, aren't finances a problem for blacks and other minorities interested in engineering?

SMITH: Yes, finances are a problem, a problem which any low income group has. But relatively speaking, there's more financial aid available to the minorities than for the poor whites. That's probably why I didn't tick it off as a problem.

BE: I have a quote of yours from *Business Week:* "Unless we start producing not 400 but 4,000 to 6,000 minority engineers a year within the decade, industry will not be able to achieve its goals, and the nation will face social problems of unmanageable dimensions."

This is similar to what you said earlier, and I was wondering what problems you see occurring and why?

SMITH: If you don't get enough blacks and minorities into visible top management positions, you could have American industry run by what blacks would regard as the white establishment. And it wouldn't be because the establishment perpetuated itself. It would simply be because there were no engineers available to help run it. And then you could have a heavy percentage of minorities going into government and education. That dichotomy would not be good for the world, the white group running the industry and the minority group running government and education. I can't think of a worse pattern for the future of America. Instead of an interlocking pattern in which there are all races and all ethnic groups and all religions, together running government, business and education, you would have blacks and other minorities concentrated in government and education, and looking with suspicion upon business which would still be an all-white enclave, much as it is today.

BE: And you think that would be socially disastrous?

SMITH: I do. We need people from all backgrounds involved at all levels, particularly the decision-making levels, in all areas of society.

BE: Thank you, Mr. Smith. □

Chapter 4. The American College Minority Engineering Program Story

Indianapolis Recorder,Indianapolis, Marion County, 19 April 1975

ECPD aids high school students with engineering as their goal

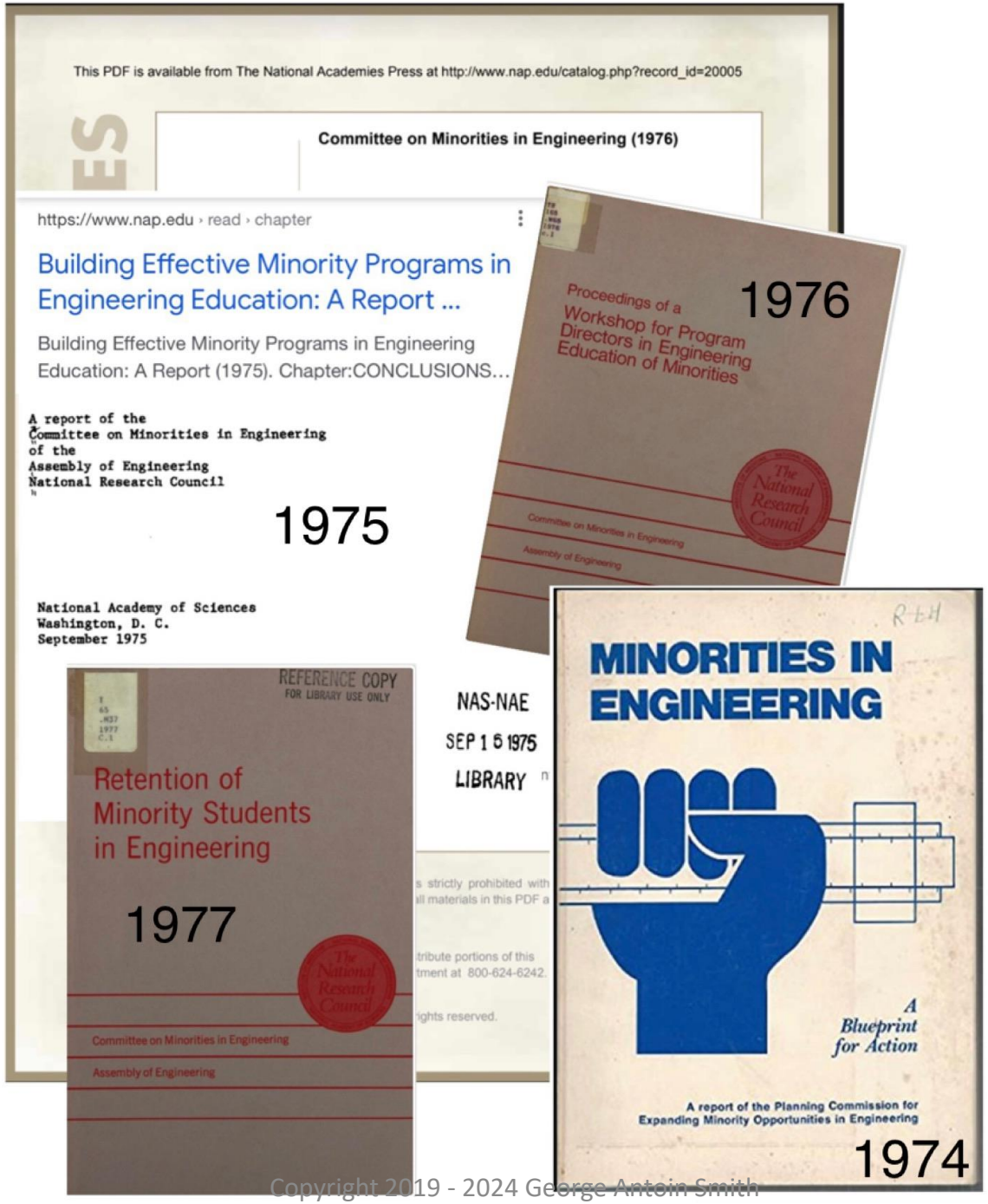
NEW YORK, N.Y. --

Minority groups and junior high school students, likely two-scores over the nation may benefit by the expanded program of Minority Introduction to Engineering (MITE). The Engineering Council for Professional Development, Inc. (ECPD) sponsors the MITE program.

A typical MITE program is a two week, in-depth on campus exposure to engineering for minority group students entering their senior year of high school. MITE represents a minimum of 2,000 minority group students a year being personally exposed to engineering.

ECPD as part of its guidance effort secured funds from RCA, IBM, Eastman Kodak, E.I. DuPont , De Nemour & Co., Olin Company Charitable Trust and others to support several programs of forty students, each at various engineering colleges across the nation in 1974.

Minority group high school juniors who might benefit by a live-in two-week, all expenses paid experience on an engineering school campus, may write or call for an application form. Write Dr. L.S. Senhouse, Jr., Engineers' Council for Professional Development, 345 East 47th Street, New York, N.Y. 10017, telephone (212) 752-6800, Ext. 518.



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Committee on Minorities in Engineering
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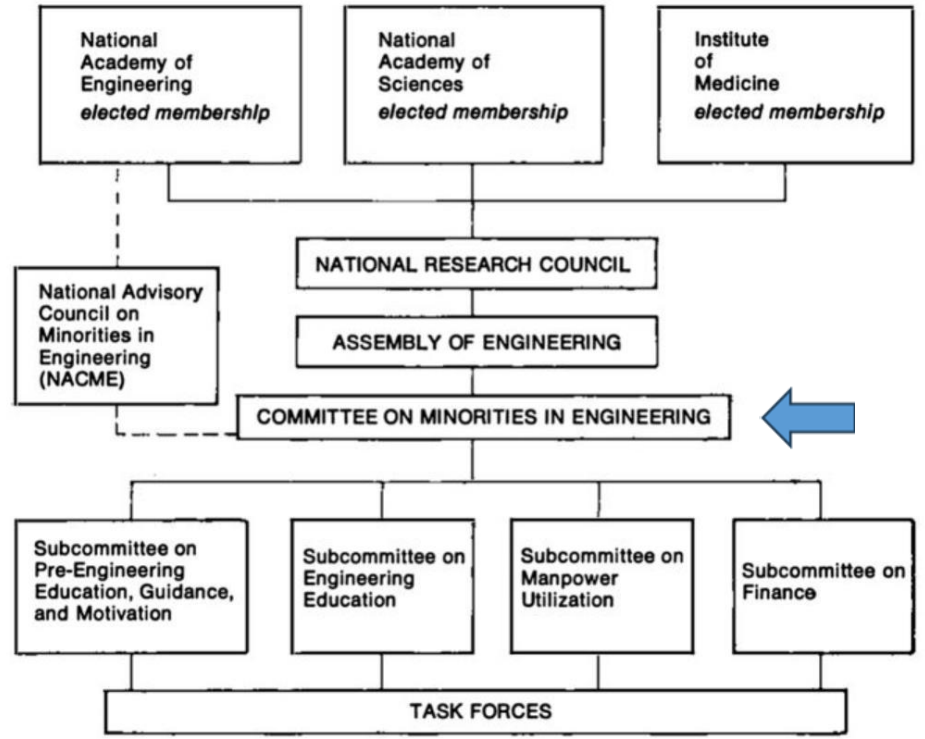
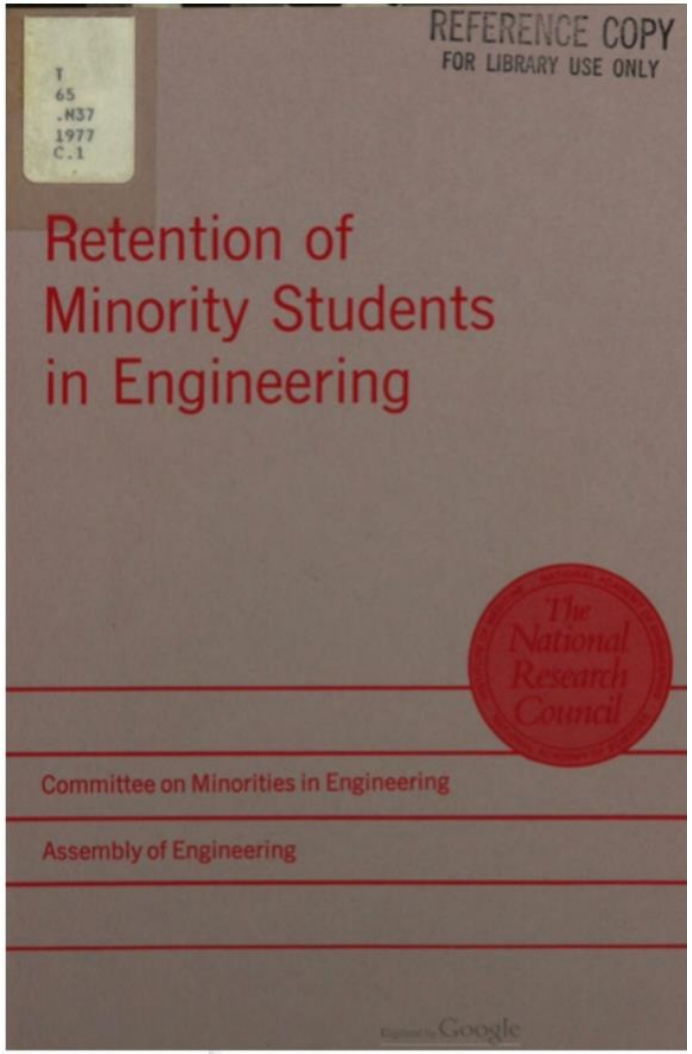


Retention of Minority Students in Engineering

A Report of the
Retention Task Force

Committee on Minorities in Engineering
Assembly of Engineering
National Research Council

NATIONAL ACADEMY OF SCIENCES
Washington, D. C. 1977



Chapter 5. The Growth of NSBE Story

1978

NSBE Newsletter
National Society of Black Engineers

Volume 1, No. 1 January, 1978

NEW PRESIDENT TAKES OVER

The Individual and the Organization

Prospective members commonly ask the following questions: when considering the National Society of Black Engineers (NSBE). What do I stand to gain by being a member? How can I contribute to my local chapter? How can my chapter acquire recognition and prestige? Will participating in the NSBE help me to prepare for my career?

Inherent in these questions are goals that black students have set for themselves. These goals are: To succeed academically; To strengthen the local NSBE chapter; To prepare for an engineering career. Reaching these goals has a dual benefit. First, the individual profits from his attainment. Second, if the individual is a member of NSBE, the organization profits by having a strong member. The organization can then use this strength to assist its members in reaching their goals. A cycle is established.

Consider how the individual can contribute to the achievement of the above goals. Next, think about what the individual stands to gain from this contribution. Finally, consider how these accomplishments are in line with the overall objectives of the National Society of Black Engineers.

Academic Success

Academic success should be the goal of every student. The obvious way to contribute to accomplishing this goal is to make academic achievement your top priority. What you stand to gain from this contribution is also obvious. The strongest foundation you can have in a student organization is academic success. Your proven ability to make the grade is a strength that no one can belittle. Each member's success in this area contributes to the objectives of NSBE. As a national organization, one of our objectives is to promote high academic performance among minorities studying engineering.

NSBE National Chairperson goes to work immediately — Richard L. Toeler II (right) met with Corning Glass Works (C.G.W.) managers for two days to discuss the next year's areas of program development and organization goals. Daniel C. Lammie — Director, Recruiting, Non-Exempt Personnel and Affirmative Action, Personnel Division, has over the past years expressed concern for the principles and practices of minority engineering organizations and recognizes their achievements in increasing the selection pool of highly qualified engineers.

Strengthening the Chapter

The primary purpose of the NSBE chapter is to facilitate the success of minorities studying engineering. Every member can help fulfill this purpose by working to strengthen the chapter. The specific activities of each chapter will depend on the needs of the students involved. However, every chapter should become involved in the

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The National Chairperson's Emeritus Remarks

Amid the present level of technical sophistication and scientific accomplishments, an effort is underway to assure the minorities of this country a fair and equal opportunity to participate within all levels of the engineering profession. This effort is commonly referred to as the Minority Engineering Effort (MEE). The basic objective: "To increase the number of minorities with degrees in Engineering, ten-fold in ten years." That is to say, circa 1985, the total number of degree-holding engineers, non-whites will represent their equivalent United States population parity.

Presently, Blacks represent less than 5% of the total enrollment in accredited engineering programs throughout the country; this figure was less than 1% in 1972. Of those identifiable Blacks in the engineering profession, only a small percentage have advanced degrees, or is a registered Professional Engineer, as opposed to being employed as a technician or an assistant to an engineer. The present ratio of Black to white engineers is not so alarming when one considers the fact that few Blacks have relatives, neighbors, or social acquaintances who are engineers. However, exposing the Black community to the engineering profession remains to be a voluminous task.

With such a scarcity of Black professional engineers, there is little wonder Black youths would, and do, have a difficult time in properly selecting a career in engineering. Given

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NSBE Fourth Annual Conference

The Ohio State University Chapter of the National Society of Black Engineers is hosting the fourth annual NSBE Conference. The conference will be held from Thursday, April 20 through Sunday, April 23 on the Ohio State University campus in Columbus, Ohio. The annual conference presents an excellent opportunity for interested minority engineering students to discuss the various social-technical issues that are of direct concern to the minority student and engineer. There will be a job fair in which delegates will be able to talk with company representatives from

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IBM Corporation Fellowship Awards

IBM maintains one-year graduate fellowships at approximately thirty universities. A fellowship award provides tuition and fees, with an annual stipend of $4,400 and a Departmental Research Grant of $2,000 awarded to the department. Institutions are determined by IBM. A few postdoctoral grants paying $14,000 are also made, as well as some awards for minority fellowships. Fields of study are determined by IBM and are currently limited to mathematics, physics, chemistry, electrical engineering, mechanical engineering, materials science, and computer or information science. A characteristic of the program is the rotation of awards among institutions or among the departments of institutions.

The fellowships are generally intended for doctoral candidates who are in their dissertation year. Selection of nominees for the award is made by university personnel. Applicants are advised to contact the dean of the graduate school or the department chairman of the institution they plan to attend.

Address:
Scientific Relations Department
IBM Corporation
Thomas J. Watson Research Center
Post Office Box 218
Yorktown Heights, NY 10598

William A. Johnson II — "77-78" National Chairperson Emeritus holds a M.S. in Structural Engineering from Stanford University and is a registered professional engineer employed by the Bechtel Corporation in San Francisco. While an undergraduate, he served as Region 6 chairperson and National Chairperson of NSBE.

1978 NSBE CONFERENCE APRIL 20-23

1979

NSBE Newsletter
National Society of Black Engineers

Volume 1, No. 2 March, 1979

THE PROCESS OF PROGRESS

Inside This Issue!

What Has Been Accomplished?

by Virginia Booth
National Chairperson

A year has passed and questions are raised - "What has been accomplished?" "What remains to be done?" "Who will do it?" "How?"

These questions and others usually set the criteria for assessing the progress and evaluating the effectiveness of any plan of action. For an organization such as The National Society of Black Engineers, these questions are crucial to our continued development.

First, let us look at some of our accomplishments. As of the last national conference in April of 1978, NSBE had approximately nine (9) chartered chapters that were officially recognized by the organization. Our membership count was approximately 200 registered members across the country. Since then, our official chapter listing has grown to include more than 30 accredited engineering schools. Our membership now exceeds 1000 minority engineering students, and the development of intensive programs on the local level is more apparent.

Many of our local chapters have implemented carefully planned programs to benefit students as well as their respective communities. These programs often were directed towards enhancing the awareness of younger brothers and sisters as to the opportunities that were available to them in the various fields of engineering and the related sciences. Many programs were geared towards exposing college students to the career opportunities available to them upon completion of their academic requirements. Other programs were directed towards recognizing those who have affected the technological advancement of mankind through their respective

(continued on page 4)

Shortly after addressing the audience of the September 15th National Symposium, NSBE National Chairperson Virginia Booth personally relayed her concerns to corporate executives on specific retention problems which have to be faced and improved upon in the overall process, before we can obtain absolute progress.

Changes in the Executive Board

As many of you already know Region 2 has not been functioning as a group under the NSBE. Since the Region 2 Chairperson's Office has been vacated because of inacting leadership, the National Executive Board has petitioned Violette Brown for this position. Violette is a third year student at Howard University majoring in Chemical Engineering and had expressed an interest in the office of Region 2 Chairperson in October of last year. Violette met with NSBE National Chairperson, Virginia Booth, in early November and was briefed on previous executive board planning tactics, organizational mailing routines, and most importantly the necessity of accurate report writing on the executive level. Violette is now in the process of preparing vital background information, such as the development of future NSBE objectives and goals, Chartered Chapter procedures for ratification of amendments and/or constitutional by-laws in regional caucuses. The material is scheduled for completion, and to be made ready for distribution at the Annual Conference. All Region 2 delegates should plan on contacting Violette and informing her of specific chapter agenda requests. The address is School of Engineering Office of the Associate Dean, Howard University, Washington, D.C. 20059. c/o Violette Brown.

Effective Minority Engineering Programs

by Paul Bayless

That the consequences of America's long and ugly history of racial discrimination are still indelibly engraved on our social institutions cannot be denied. Most of us are all too painfully aware of the formidable barriers that have stood in the way of Blacks and other minorities seeking to participate equitably in our society. Perhaps no area better exemplifies the effects of exclusion than education and career preparation.

Despite the interest and efforts toward increasing the participation of Blacks and other ethnic minorities in scientific and engineering careers, we still are poorly represented in these disciplines. According to the 1972 national survey of scientific and engineering personnel, Black Americans were 11% of the U.S. total population, but only 1.2% of the nation's scientists and engineers. The situation has changed little since that study was conducted.

It should be emphasized that this reflects, in large part, the extent to which Blacks have chosen of their own free will to become scientists, engineers and architects. The barriers of exclusion and discrimination certainly cannot be ignored, but if this process has produced grossly inadequate numbers of scientists, the time has come for organized systematic intervention. Counselors, parents, teachers and administrators at all levels of the educational establishment must work together to encourage,

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Paul C. Bayless holds a M.S. in Industrial Engineering from Ohio State University, and is presently serving as Director of Affirmative Action at Purdue University.

Membership Involvement And Retainment

by Glen Cole
Region 4

The issue of membership involvement and retainment is crucial to the well-being of individual chapters of NSBE and to the society as a whole. Without a cohesive organization to encourage and direct young black engineers, their number will surely decrease. Those same decreases will ultimately lead to the downfall of NSBE, and we simply cannot allow that. The two goals of involvement and retainment are inter-related and equally important. Accomplishing these things at the chapter level is not always straightforward or "textbook." There are certain steps concerned people can take, but getting there often requires flexibility.

Involvement is largely a matter of implementing programs the membership is interested in. An important first step is getting feedback from people on types of action the group should attempt. No officer should commit his organization to any project without trying to consult the members. Once a course of action is decided on, everything possible

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1980

NSBE Newsletter
National Society of Black Engineers

Volume 1, No. 3 — April, 1980

COMMUNICATIONS — KEY TO THE 80'S

THE WAY WE WERE

N.S.B.E. Fifth Anniversary Issue

THE WAY WE ARE

1975-76 Task Force Founders

Region I — James Clark — M.I.T.
Region II — James Baker — U. of Penn.
Region III — Dietrix Wahatley — Georgia Tech.
Region IV — John Cason — Purdue Univ.
Region V — Mike Joshua — Univ. of Mo. @ Rolla
Region VI — William A. Johnson — Cal. State @ L.A.

First National Chairperson Elect
William A. Johnson II (1976-77)

Second National Chairperson Elect
Richard L. Toler II (1977-78)

Third National Chairperson Elect
Fourth National Chairperson Elect
Virginia L. Booth (1978-80)

Inside This Issue!

1976-77 Executive Officers

National Vice-Chairperson: Arnold Donald — Washington Univ.
National Treasurer: Willie Simmons — Cal. State @ L.A.
National Secretary: Barry Burrell — Univ. of Houston
Region I Chairperson: James Hubbard — M.I.T.
Region II Chairperson: Neville Dennis — Univ. of Penn.
Region III Chairperson: Evangeline Brown — Georgia Tech.
Region IV Chairperson: Keith Boswell — Univ. of Cincinnati
Region V Chairperson: William Hopkins — Washington Univ. Pamela Mukolu — Univ. of Houston
Region VI Chairperson: Barbara Collins — Cal. State @ Pomona

1977-78 Executive Officers

National Vice-Chairperson: Barry Burrell — Univ. of Houston
National Treasurer: Jerry Good — Purdue Univ.
National Secretary: Lori Pryor — Univ. of Michigan
Region I Chairperson: Ted Austell — M.I.T.
Region II Chairperson: Neville Dennis — Univ. of Penn.
Region III Chairperson: Willie Thomas — Univ. of Florida
Region IV Chairperson: James White — Purdue Univ.
Region V Chairperson: Nolan Millet — Washington Univ.
Region VI Chairperson: Elaine Gaspard — Stanford Univ.
Communications Chairperson: Alexander Ovie — Howard Univ.
Finance Chairperson: Shanton Williams — Georgia Tech.
Membership Chairperson: Donald An thony — Princeton Univ.
Programs Chairperson: Virgil Lewis — Ohio State
Publications Chairperson: William Hopkins — Washington Univ.
Public Relations Chairperson: Sharon Lee — Univ. of Florida

1978-79 Executive Officers

National Vice-Chairperson: Willie Thomas — Univ. of Florida
National Treasurer: Michele Cooper — Purdue Univ.
National Secretary: Ruth Green — Temple Univ.
Region I Chairperson: Edwin Ocasio — New Jersey Instit.
Region II Chairperson: Violette Brown — Howard Univ.
Region III Chairperson: Irving Fordham — Georgia Tech.
Region IV Chairperson: Patrice White — Univ. of Michigan
Region V Chairperson: Michael Mason — Univ. of Houston
Region VI Chairperson: Rodney Buie — Stanford Univ.
Communications Chairperson: Kim Craft — Univ. of Penn.
Finance Chairperson: Shanton Williams — Georgia Tech.
Membership Chairperson: Ronnie Price — Univ. of Houston
Programs Chairperson: Donald Anthony — Princeton Univ.
Publications Chairperson: William Hopkins — Washington Univ.
Public Relations Chairperson: Katherine Higgins — Univ. of Louisville

N.S.B.E. Professional Task Force Excerpts from a study to assist with developing a forum for black graduate engineers.

Case History Of S.W.E. @ Pratt University. A reorganization of members and ideas for women.

Professor Wanted Lehigh University has faculty position available at associate professor level.

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Acknowledgements: My Fellow Founders & The NSBE F.A.C.T. Committee

Purdue University

The Founding Chapter of National Society of Black Engineers Carries Forth Legacy

THE END