Dr. Edward R. Kane, President of E.I. DuPont de Nemours and Co., Inc., addresses the Golden Triangle Alliance for Minorities in Engineering at Lamar University, Beaumont, Texas on December 2, 1977. Looking on are Mr. Lawrence Marshall, Associate Superintendent, Houston Independent School District (and President of TAME, Inc.) and the Honorable John G. Tower, Senior United States Senator from Texas.
SUMMARY

TAME, Inc. was created in 1976 by a group of friends and colleagues in the engineering colleges, public schools and industry who, interacting with one another, had become individually concerned at the low percentage of minority students in the state’s engineering colleges. They thereupon formed a modest organization within which to work collectively.

The academic year 1977-78 has been a singularly productive one for TAME, Inc. Six regional alliances were created — in Corpus Christi, Dallas, Beaumont/Orange/Port Arthur, El Paso, Fort Worth and Victoria — joining the programs now in being in the Rio Grande Valley, Houston, San Antonio and Austin.

The state’s engineering schools observed a net increase of 190 entering minority freshmen over the previous year, 1976, when the best available records indicate that 900 minority freshmen enrolled. This increase of 21% in a single year suggests that the efforts of the universities, industry and presumably TAME itself are beginning to succeed in the effort to increase minority representation in engineering.

The board of directors takes considerable pride in the relatively modest budgets by which its corporate purposes have been advanced. It has concluded that the problem TAME, Inc. is addressing is not one to be solved primarily by money, but rather by energizing local interests, encouraging non-traditional forms of cooperation and the marshaling of local resources. By August 31, 1978 our expenditures for the year are projected to be in the range of $50,000 with a budget for the next fiscal year at a level of $80,000.

In March of 1978, the board met at Lakeway, near Austin, with the directors of the then-existing local alliances, for its first retreat and long range planning session. The success of this session led us to decide that two such annual sessions would be optimum. Accordingly, the board and the regional directors will meet in Austin on January 8-9, 1979 as participants in the National Academy/NRC regional symposium on minorities in engineering. This symposium will be cosponsored by TAME, Inc., The University of Texas at Austin and the Academy.
ACTIVITIES AND PROGRAMS

During the academic year 1976-77, TAME, Inc.'s first year of operation, four regional alliances were created; in the Rio Grande Valley, in Houston, in San Antonio and in Austin as described in last year's annual report.

This activity continued in academic year 1977-78 with the creation of six additional alliances in Corpus Christi, Dallas, Beaumont/Orange/Port Arthur, El Paso, Fort Worth and Victoria.

Our organizing method continued as before; on a Friday afternoon, a TV-press conference is called, usually by the urban school district which is participating. Representatives of local industry, universities, junior colleges and invited speakers discuss the purposes of the weekend symposia. On Friday evening, TAME, Inc. hosts a reception and dinner for public school officials, school board members, industry, commercial and political leaders in the community. A brief program describes TAME, Inc. and its concerns, the NACME slide/tape presentation “A Good Place to Start” is shown and a prominent speaker is featured. On the following Saturday, a morning-long program, devised for math and science teachers, counselors and high school students, is presented. Luncheon is served to all participants and a speaker eminent in the engineering profession closes the program. The programs for these six symposia appear in Appendix “A”.

It will be of some interest to set out details of a few local programs and thereby give the reader some conception of how TAME, Inc. actually works. Appendix “B” describes the Austin Alliance which has been in operation for over one year. Appendix “C” is the program for the newly-formed Victoria Alliance’s teacher in-service program and a parent-student orientation.

During the Fall of 1977, TAME, Inc. with the cooperation of The University of Texas School of Communication, produced a 12 minute videotape, “You Can Get There From Here!” It describes the engineering profession, portrays a number of engineering specialties and utilizes minority engineering students and young minority engineers in industry to create a believable atmosphere. This videotape has been distributed to every regional alliance, to all of the major school districts and to the twenty Educational Service Centers operated by the Texas Education Agency. The videotape is available on loan at no cost to users outside the state of Texas.
PERSONNEL

A current roster of regional alliance chairmen is given below:

**Austin:**
Mr. Ken R. Cargill  
Personnel Manager  
IBM Corporation  
11400 Burnet Road  
Austin, Texas 78759  
(512) 838-6410

**Beaumont/Orange/Port Arthur:**
Mr. Robert Brownlee  
E. I. DuPont de Nemours & Co., Inc.  
P. O. Box 1089  
Orange, Texas 77630  
(713) 883-8411

**Corpus Christi:**
Mr. J. Howard Stark  
Sun Oil Company  
P. O. Box 2608  
Corpus Christi, Texas 78403  
(512) 241-4811

**Dallas:**
Mr. William C. Hamilton  
Executech  
7122 Alpha Road  
Dallas, Texas 75240  
(214) 661-2193

**El Paso:**
Mr. Edwin P. Murdoch  
Mountain Bell Telephone Co.  
L. 48 500 Texas Street  
El Paso, Texas 79901  
(915) 452-4341

**Fort Worth:**
Mr. J. Patrick Jamison  
Texas Electric Service Co.  
P. O. Box 970  
Fort Worth, Texas 76101  
(817) 336-9411

**Houston:**
Dr. Stanley G. Ebner  
Dean of Technical Studies  
University of Houston-Downtown  
One Main Street  
Houston, Texas 77002  
(713) 749-2060

**Rio Grande Valley:**
Mr. Philip Rogers  
Region I Educational Service Center  
1900 W. Schunior  
Edinburg, Texas 78539  
(512) 383-5611

**San Antonio:**
Dr. William R. Wakeland  
Chairman, Engineering Science  
Trinity University  
715 Stadium Drive  
San Antonio, Texas 78212  
(512)736-7512

**Victoria:**
Mr. A. D. Cyphers  
E. I. DuPont de Nemours & Co. Inc.  
P. O. Box 2626  
Victoria, Texas 77901  
(512) 573-3211

A typical alliance in terms of size and composition, that of El Paso, is also shown, Appendix "D".
EFFECTIVENESS

It is of critical importance that we establish a means of measuring our effectiveness as an organization entrusted with substantial contributions from industry and foundations. We in fact addressed ourselves to this problem at the board retreat at Lakeway, near Austin in March of 1978. The executive director is to submit an evaluation plan to the board in the Fall of 1978.

An essential first step is to establish a numerical baseline against which to plot enrollment (and ultimately retention and graduation) figures over time.

We are compelled to start modestly because data is either partial or unavailable. Appendix “E” indicates changes over a two-year period in freshmen engineering enrollments. While there has been about a 20% increase in minority freshmen for the current year, we have as yet no way of knowing what contributed to the rise, how many of last year’s freshmen remain in the engineering curriculum, nor any means of forecasting future minority enrollments.

It is probably safe to generalize that industry funds for financial aid and active recruitment by the schools of engineering together with a growing number of early identification and summer programs have produced the 20% increase we now see. Given the ambitious program TAME has set for itself and the rising proportion of minorities in the Texas school-age population (40%), we can conclude on intuitive grounds that we must see an exponential rather than a linear increase in minority engineering enrollment over the next three years in order to claim effectiveness for TAME’s effort.
FUNDING AND BUDGET

Acquisition of a declining balance three-year grant from the Alfred P. Sloan Foundation in the Fall of 1977 made possible a considerable increase in TAME's activities in 1977-78. In November, 1977, the budget committee allocated $47,000 for the period September 1, 1977 to August 31, 1978. This budget appears as Appendix “F”. TAME's books are kept on a cash basis and we have retained the accounting firm of Garcia, Morrison & Co. to oversee our accounts. They have prepared our financial statement for the fiscal year ending June 30, 1978, for use in our corporate tax return. The budget committee has recently voted to alter our tax year to correspond with our budgeting cycle.

Large industrial corporations continue to be our source of financial support, apart from the Sloan grant. These companies are:

- Amoco Foundation Inc.
- Celanese Corporation
- Continental Oil Company
- Dow Chemical, USA
- E. I. DuPont de Nemours & Co., Inc.
- Exxon Company, USA
- The General Electric Foundation
- International Business Machines Corporation
- Mobile Oil Corporation
- Motorola, Inc.
- Tenneco, Inc.
- Texaco, Inc.
- Texas Eastern Corporation
DALLAS SEMINAR ON MINORITIES IN ENGINEERING
October 29, 1977
Southern Methodist University
Dallas, Texas

WEST TEXAS SYMPOSIUM ON MINORITIES IN ENGINEERING
February 25, 1978
University of Texas at El Paso

FORT WORTH SYMPOSIUM ON MINORITIES IN ENGINEERING
April 15, 1978
The University of Texas at Arlington

SPONSORS:
Texas Alliance for Minorities in Engineering
University of Texas at El Paso
El Paso Community College
National Hispanic Resource Center
Mexican American Engineering Society—U.T. El Paso Student Chapter

APPENDIX A
8:15 CONTINENTAL BREAKFAST
Harvin Center

8:30 REGISTRATION - Wolfe Recital Hall Foyer

9:00 WELCOME - Wolfe Recital Hall

MR. ED SAMPLE
Counselman, City of Corpus Christi

DR. ROBERT SLOAN
Dean of Arts & Sciences, Del Mar College

MR. R. F. TICEKNER
Essex Company U.S.A.
"TAME, Inc. - Its Origins and Goals"

9:10 NACME Slide Presentation, "A Good Place to Start"
Introduction by A. W. GOODSON
Location Manager, Data Processing Division,
IBM Corporation, Corpus Christi

9:35 "BUT WHERE IS THE MONEY COMING FROM"
MR. JACK ROBOTTOM, Executive Director, TAME, Inc.

9:45 PANEL PRESENTATION
Industry's Stake in Minority Engineering Education
Moderator: MR. A. W. GOODSON, IBM, Corpus Christi

PANEL:
MR. CAROLYN EVANS
Systems Engineer, IBM, Houston

MR. CARLOS MC'DERMOTT
Industrial Consultant, Counter Power & Light Co., Corpus Christi

MR. A. MILLER
Industrial Relations
Celanese Corporation, Corpus Christi

MR. ED SAMPLE
Engineer
Champlin Refinery, Corpus Christi

10:20 QUESTION and ANSWER PERIOD

10:35 COFFEE

10:55 PANEL PRESENTATION
ENGINEERING EDUCATION OPPORTUNITIES

MODERATOR: DR. GREG GRIDLEY,
Director of Developmental Services,
Corpus Christi Independent School District

PANEL:
DR. E.J. PIEL
Executive Director NCCCD
College of Engineering & Applied Sciences
State University of New York at Stony Brook

MR. JOE TREJO
City Engineer, City of Kingsville

MR. RALPH E. GILCHRIST
Dean, College of Science & Technology
Corpus Christi State University

DR. GEORGE TREVINO
Department of Physics
Del Mar College

MR. FRANK VELTRY
Science Consultant
Corpus Christi Independent School District

11:30 QUESTION and ANSWER PERIOD

11:45 FILM, "A Heritage of Change"

12:00 LUNCH - Harvin Center, Retama Room

INTRODUCTION OF SPEAKER:
DR. GREG GRIDLEY
Director of Department of Developmental Services

PRINCIPAL SPEAKER:
DR. DAVID R. REYES GUERRA
Executive Director,
Engineers' Council for Professional Development

PRESIDING:
MR. JACK ROBOTTOM
Executive Director, TAME, Inc.
8:00 a.m.  CONTINENTAL BREAKFAST AND REGISTRATION  Ballroom, Umphrey Lee Student Center, SMU

8:40 a.m.  CONVENE FOR PLENARY SESSION  Mr. John S. Robottom, Executive Director, TAME, Inc., Presiding
   WELCOME
   Mr. Robert Polans, Mayor of Dallas
   Dr. Karl Willenbrink, Dean, School of Engineering and Applied Science, SMU
   Mr. Peter Suarez, Equal Opportunity Program Manager, IBM Corporation

8:50 a.m.  NACME SLIDE PRESENTATION, "A Good Place to Start"  Introduction by Mr. James Malone, System Support Center Manager, IBM Corporation, Dallas

9:15 a.m.  "BUT WHERE IS THE MONEY COMING FROM?"  Mr. Garvey E. Clarke, President
   National Fund for Minority Engineering Students, New York

9:30 a.m.  PANEL PRESENTATION  Industry's Stake in Minority Engineering Education  Moderator: George Berryman, Manager Corporate College Relations, Texas Instruments
   Panel: Mr. Mary Wallace, Technical Services Engineer, Texas Power & Light, Dallas
          Mr. Bob Edwards, Personnel, Southwestern Life Insurance
          Mr. Tinti Ganz, Heating and Air Conditioning
          Mr. Al Nash, Manager of Personnel — Hybrid
          Mr. Art Daviller, Corporate Manager, Minority Development, IBM Corporation

10:15 a.m.  QUESTION AND ANSWER PERIOD  Moderator: Dr. Ruby Morris, Deputy Assistant Superintendent — Pupil Personnel Services, DISD

10:30 a.m.  COFFEE

10:50 a.m.  PANEL PRESENTATION — The Engineering and Academic Resources of North Central Texas  Moderator: Dr. B. J. Stamps, Assistant Superintendent — Instructional Services, DISD
   Panel: Dean Jack W. Herkey, Assistant Dean, School of Engineering and Applied Science, SMU
          Dr. John D. Daugh, Chairman, Math and Engineering Division, Eastfield College
          Dr. Elwin S. Fiege, Assistant Professor, Department of Industrial Engineering, University of Texas at Arlington
          Dr. Marian Vitch, Jr., Program on Technology in Society, State University of New York, Stony Brook, N.Y.

11:30 a.m.  QUESTION AND ANSWER PERIOD  Moderator: Mr. William C. Hamilton, Executive Vice-President, Executex Inc., Management Consultants

12:00 noon  LUNCHEON  Cafeteria, Umphrey Lee Student Center, SMU
   Program, Ballroom

RECEPTION  TEXAS ALLIANCE FOR MINORITIES IN ENGINEERING, INC.
   Hilton Inn
   October 25, 1977

Introduction: Moderator.......................... 8:15 p.m.
   Invocation: Dean Jack Harkey, Assistant Dean, School of Engineering and Applied Science, SMU
   Dinner: South Ballroom.......................... 8:45 p.m.

Welcome and Introductions
   • Mr. John S. Robottom, Presiding
   • Mr. Peter M. Suarez, Equal Opportunity Program Manager, International Business Machines Corporation, Vice-President, TAME, Inc.
   • Dr. James H. Zumberge, President
   • Southern Methodist University, Dallas
   • Mr. D. Jan LeDoan, Vice-Dean of Academic Affairs
   • Dallas County Community College District
   • Mr. Robert J. Price
   • Member, Board of Education
   • Dallas Independent School District
   • Mr. R. N. Roark, Manager
   • Part Seated Colleges, Dallas
   • Eastern Pipe Line Company

National Academy of Engineering Student Presentation
   • Mr. Garvey E. Clarke, President
   • National Fund for Minority Engineering Students, New York

Principal Address
   • Honorable Robert Knoll
   • 2nd District, House of Representatives
   • U. S. Congress

DALLAS SEMINAR
8:15 a.m. CONTINENTAL BREAKFAST AND REGISTRATION
Richard W. Setzer Student Center, Arbor Area

9:00 a.m. SEMINAR — Science Auditorium

WELCOME: Dr. George E. McLaughlin
Vice President for Student Affairs
Lamar University

Mr. R. L. Hansen
Manager, Technical Recruiting and College Relations
Dow Chemical, U.S.A.
Director, TAME, Inc.
TAME, Inc. — its Origin and Goals

9:10 a.m. NACME SLIDE PRESENTATION, “A Good Place to Start”

INTRODUCTION:
Ms. Rebecca Turner
Affirmative Action Coordinator
Gulf States Utilities Company, Beaumont

9:30 a.m. PANEL PRESENTATION
Industry’s Involvement in Minority Engineering Education

MODERATOR:
Mr. Joe Kanwaker
Supervisor
Texaco Incorporated, Port Arthur

PANEL:
Ms. Carolyn Evans
Senior Systems Engineer
IBM Corp., Houston

Mr. T. G. Reynolds
Assistant Plant Manager
Texaco Incorporated, Port Arthur

Dr. R. N. Holstein
Coordinator of NACME Programs
E. I. du Pont de Nemours & Co., Inc., Wilmington, Delaware

10:00 a.m.

10:45 a.m. PANEL PRESENTATION
Engineering Education Opportunities

MODERATOR:

Dr. Richard L. Price
Associate Professor of Mathematics
Director of Engineering Minority Recruitment and Retention
Lamar University

PANEL:

Mr. Lawrence Marshall
Associate Superintendent
Houston Independent School District
President
Texas Alliance for Minorities in Engineering, Inc.

Dr. R. A. McAllister, P.E.
Dean, College of Engineering
Lamar University

Dr. E. J. Piel
Executive Director, National Coordination Center for Curriculum Development
College of Engineering and Applied Science
State University of New York at Stony Brook

11:45 a.m. “We Have Started”

Mr. R. C. Brownlee
Senior Engineer
E. I. du Pont de Nemours & Co., Inc., Orange
Chairman
Golden Triangle — NACME Committee

12:00 NOON LUNCH — Richard W. Setzer Student Center Ballroom

INTRODUCTION OF SPEAKER:

Dr. John S. Robottom
Executive Director
TAME, Inc.

1:30 p.m.

INTRODUCTION OF SPEAKER:

Mr. Garvey E. Clarke
President
The National Fund for Minority Engineering Students
New York, N.Y.

LAMAR UNIVERSITY
December 2, 1977

RECEPTION
6:00 — 7:00 p.m.
Julie Plummer Reading Room
Mary and John Gray Library

BANQUET
7:00 p.m.
Richard W. Setzer Student Center
Ballroom

INVOCATION
The Reverend Edward W. Brown, Pastor
Antioch Missionary Baptist Church,
Beaumont

INTRODUCTIONS

NATIONAL ADVISORY COUNCIL ON MINORITIES IN ENGINEERING SLIDE PRESENTATION —
“A Good Place to Start”
Dr. John S. Robottom
Executive Director, Texas Alliance for
Minorities in Engineering, Inc.

INTRODUCTION OF SPEAKER

Mr. R. C. Brownlee
Senior Engineer
E. I. du Pont de Nemours & Co., Inc.,
Orange
Chairman
Golden Triangle — NACME Committee

SPEAKER

Dr. Edward R. Kane
President
E. I. du Pont de Nemours & Co., Inc.,
Chairman
National Advisory Council on Minorities in Engineering

INTRODUCTION OF SPEAKER

Mr. Lawrence Marshall
Associate Superintendent
Houston Independent School District
President
Texas Alliance for Minorities in Engineering, Inc.

SPEAKER

The Honorable John G. Tower
United States Senator from Texas

— Presiding —

Dr. R. A. McAllister, P.E.
Dean, College of Engineering
Lamar University
8:15 a.m.  Cafe y Pan de Dulce  
Union Theater Lobby

9:00 a.m. **SEMINAR—Union Theater**

**WELCOME:**  
Mr. Oscar Valadez  
Vice President, Instruction and  
Student Affairs  
El Paso Community College

Dr. Kenneth E. Beasley  
Vice President for Academic Affairs  
University of Texas at El Paso

The Honorable Roy Salazar  
Mayor of the City of El Paso

9:20 a.m. **“TAME—Its Structure and Goals”**

Mr. Richard L. Hansen  
Manager, Technical Recruiting  
and College Relations  
Dow Chemical, U.S.A.  
Treasurer, TAME, Inc.

9:35 a.m. **PANEL PRESENTATION**

**MODERATOR:**  
Dr. Jack Smith  
Dean, College of Engineering  
University of Texas at El Paso

**PANEL:**  
Mr. Dan Guerrero  
Executive Assistant  
Mexican American Engineering Society

Mr. Robert Hage  
National Fund for Minority Engineering Students

Mr. Manuel Chavez  
Senior Engineer Manager  
Office Products Division—Austin IBM

Mr. George Ferguson  
Counselor, Jefferson High School  
El Paso Public Schools

10:40 a.m. **BREAK**

11:00 a.m. **QUESTION AND ANSWER PERIOD**

11:30 a.m. **“Development of educational materials to strengthen the educational experience of minority students.”**

Dr. W. Lionel Craver  
Associate Professor  
Mechanical & Industrial Engineering Department  
University of Texas at El Paso

12 Noon **LUNCHEON—Union Cafeteria**

**INVOCATION:**  
Reverend Mario Islas  
Religion Instructor  
University of Texas at El Paso

**INTRODUCTION OF SPEAKER:**  
Mr. Antonio Tijerina—G.  
National Hispanic Resource Center

**SPEAKER:**  
Mr. Jaime Oaxaca,  
Vice President  
Electromechanical Division  
Northrop Corporation

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**WEST TEXAS SYMPOSIUM**

**Granada Royale Hotel—Eastside Meeting Room**  
6100 Gateway East, El Paso, Texas  
February 24, 1978

**RECEPTION**  
6:00—7:00 p.m.

**BANQUET**  
7:00 p.m.

**INVOCATION**  
Most Reverend Sidney Metzger  
Bishop of the El Paso Diocese

**“TAME—ITS STRUCTURE AND GOALS”**  
8:00 p.m.  
Mr. Raymond F. Tedder  
Exxon Co., U.S.A.  
Chairman of the Board, TAME, Inc.

**NATIONAL ADVISORY COUNCIL ON MINORITIES IN ENGINEERING SLIDE PRESENTATION**  
“A Good Place to Start”  
Mr. John S. Robottom  
Executive Director, TAME, Inc.

**INTRODUCTION OF SPEAKER**  
Dr. Robert E. Shepard—President  
El Paso Community College

**SPEAKER**  
Dr. David Reyes-Guerra  
Executive Director  
Engineers Council for Professional Development

**INTRODUCTION OF SPEAKER**  
Dr. John Hernandez  
Dean of Engineering  
New Mexico State University

**SPEAKER**  
Mr. Patrick Apodaca  
Associate Legal Counsel to the President

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Mr. Oscar Valadez  
Vice President  
Instruction and Student Services  
El Paso Community College
8:30 a.m. CONTINENTAL BREAKFAST AND REGISTRATION

9:00 a.m. SEMINAR
WELCOME: A. D. Cyphers
President
Golden-Crescent Alliance for
Minorities in Engineering
Plant Manager
E. I. du Pont de Nemours & Co., Inc.
Victoria

Dave Goria
Vice-President
Golden-Crescent Alliance for
Minorities in Engineering
Plant Manager
Union Carbide
Seadrift

9:10 a.m. NACME SLIDE PRESENTATION,
“A Good Place to Start”
INTRODUCTION:
B. J. Hassen
Manager
Technical Recruiting and College Relations
Dow Chemical, U.S.A.
Director, TAME, Inc.

9:30 a.m. “WE HAVE STARTED”
Harry Merr
Treasurer
Golden-Crescent Alliance for
Minorities in Engineering
Manager
Southwestern Bell Telephone Co.
Victoria

9:40 a.m. SEMINAR PRESENTATION
“Innovations in Pre-College Curriculum:
Science, Mathematics and Communications”
Suean Scolfani
Assistant Director, PROMES
High School for Engineering Professions
Houston Independent School District

10:00 a.m. PANEL PRESENTATION
“After Pre-College. What???”
MODERATOR:
J. Kirk Neeman
Curriculum Director
Victoria CISD

PANEL:
Debbie Jackson
University of Houston
Houston

Dr. E. N. Noisette
Coordinator of NACME Programs
E. I. du Pont de Nemours & Co., Inc.
Wilmington, Delaware

Larry Marshall
Associate Superintendent
Houston Independent School District
President
Texas Alliance for Minorities
in Engineering, Inc.

11:30 a.m. “OPPORTUNITIES IN ENGINEERING”
Dave Goria

12:00 NOON LUNCH — Holiday Inn Banquet Room

VICTORIA COUNTRY CLUB
April 7, 1978

RECEPTION
6:45-7:00 p.m.

BANQUET
7:00 p.m.

INVOCATION
The Reverend Donald Blavier
Trinity Episcopal Church
Victoria

INTRODUCTIONS

NATIONAL ADVISORY COUNCIL ON MINORITIES IN ENGINEERING SLIDE PRESENTATION —
“A Good Place to Start”
Lawrence Marshall
Associate Superintendent
Houston Independent School District
President
Texas Alliance for Minorities in Engineering, Inc.

INTRODUCTION OF SPEAKER
Peter M. Suarez
Manager, Equal Opportunity Programs
S.W. Region
IBM Corporation
Dallas

SPEAKER
John B. Coleman, M.D.
Board of Regents
Texas A&M Systems
Houston

PRESEING
A. D. Cyphers
Plant Manager
E. I. du Pont de Nemours & Co., Inc.
Victoria
President
Golden-Crescent Alliance for
Minorities in Engineering
AGENDA
University of Texas at Arlington
Room 245 — Business Building

8:00 a.m.  Registration and Continental Breakfast

8:30 a.m.  Welcome: Dr. Bill Baker, Vice-President for Academic Affairs, The University of Texas at Arlington

8:35 a.m.  "TAME, Inc. Its Purposes and Goals": Mr. Raymond F. Tickner, Exxon Company, USA, Chairman of the Board, TAME, Inc.

8:40 a.m.  "A Good Place to Start: Slide-Film Presentation" Introduced by Mr. C. A. Reinke, Mobil Corporation, Board Member, TAME, Inc.

9:00 a.m.  Panel: "The Role of Industry in Engineering Education" Moderator: Mr. Wes Brown, Project Engineer, Southwestern Bell Telephone Co., St. Louis, Missouri

Panelists:
Mr. Sam Jackson, Specialist Circuit Engineering, Southwestern Bell, Dallas
Mr. Richard Pacheco, Texas Electric Service, Fort Worth
Mr. Steven Powell, Jr., Field Investigation Engineer, Bell Helicopter/Textron
Mr. Esteban DeLeon, General Dynamics/Fort Worth

9:45 a.m.  Questions & Answers

10:00 a.m.  Coffee

10:15 a.m.  Panel: "Engineering and Pre-Engineering Resources in the Greater Fort Worth Region" Moderator: Mr. Robert M. McAbee, Assistant Superintendent, Fort Worth Independent School District

Panelists:
Dr. Floyd Cash, Chairman, Dept. of Electrical Engineering, UT-Arlington
Mr. Gary Smith, TCC North Campus
Dr. James Bailey, Assistant Superintendent, FWISD
Mr. Troy Sparks, Assistant Superintendent, FWISD

11:00 a.m.  Questions & Answers

11:15 a.m.  "A New Approach to Pre-Engineering curriculum in the High Schools": Dr. Martin Vislich, Professor of Engineering, State University of New York at Stony Brook

11:40 a.m.  Luncheon — The Student Union. Principal Speaker: Dr. Wendell H. Nederman, P.E., President, The University of Texas at Arlington

FRIDAY EVENING
APRIL 14, 1978
Ramada Inn
Fort Worth

6:15  Reception and Cocktails, Chisholm Room

7:00  Dinner

Invocation—
The Reverend Nehemiah Davis

Welcome
Dr. Andrew E. Salls, Dean, College of University of Texas at Arlington
Dr. Joe B. Rushing, Chancellor, Tarrant County Junior College
Dr. Gerald Ward, Superintendent, Fort Worth Independent School District

7:45  "The Texas Alliance for Minorities in Engineering, Inc." Mr. R. F. Tickner, P.E., Exxon Co., USA, Chairman of the Board, TAME, Inc.

7:50  "A Good Place to Start" Slide-tape presentation of the National Academy of Engineering—introduced by Mr. Lawrence Marshall, Associate Superintendent, Houston ISD; President, TAME, Inc.

8:15  Address

The Honorable Eddie Bernice Johnson, Principal Regional Official, Department of Health, Education, and Welfare

PRESIDING
Mr. John S. Robottom
Executive Director, TAME, Inc.

FORT WORTH SYMPOSIUM
TAME Boosts Minority Students Into the Engineering Field

By Susan M. Ridgway

More than 1.2 million of our nation's citizens are practicing engineers — a profession they find both psychologically and monetarily rewarding. And as our society becomes increasingly technological, it needs more, more and more engineers.

Not only is engineering valuable per se, but it has also become the pathway to leadership in the large national and multi-national corporations.

Although Blacks, Chicanos, Puerto Ricans and American Indians comprise approximately 17 percent of the United State's total population, they represent less than 3 percent of our nation's engineers. Thus, paradoxically, our country needs more engineers, but is not taking advantage of the engineering potential of its minority citizens.

Teresa (not her real name) is a student at an Austin high school. Her aptitude in math has been noticed by her math teacher and her counselor, who have suggested she consider an engineering career.

But Teresa is a Mexican-American. Because neither she nor her family know any engineers, she has no clear idea of what a career in engineering would mean to her. And she doesn't think she can afford to go to college anyway.

This then, is the dilemma — how to break with patterns of the past and bring more minority citizens into engineering. Texas industry and education have united to launch a unique state-wide attack on the problem.

This unusual partnership is called Texas Alliance for Minorities in Engineering (TAME), and its executive director is John S. Robottom of the College of Engineering, The University of Texas at Austin.

The concept of TAME was born in 1975 at a workshop co-sponsored by UT and the Dallas County Community College District, with support from the Sloan Foundation. At that session, more than 100 workshop participants created a state-wide organization to bring together educators, industry representatives, foundations, minority communities, and students.

"The Austin Chapter of TAME was easiest to organize; there was the greatest professional commitment here. The heavy involvement of industry is making TAME work," Robottom said.

Currently, Austin's TAME group boasts participants from all high schools, the AISD administration, Austin Community College, Huston-Tillotson College, the UT College of Engineering, UT minority engineering students, local engineering consultants, the City of Austin, and, importantly, four major Austin industries — IBM, Motorola, Texas Instruments and Tracor. Westinghouse and Alcoa also have been active with TAME.

All nine Austin high schools participate in the TAME program. IBM, Motorola, Texas Instruments and Tracor each act as sponsor for at least two high schools. Each high school has set up an action committee comprised of a representative from the sponsoring industry, math and science teachers, guidance counselor and principal or assistant principal.

Identifying the minority students with engineering potential is the first objective of the TAME action committee. According to Rob Sanchez, Austin TAME secretary and a marketing manager at Texas Instruments, approximately 300 Austin students have been identified.

Minority students with engineering potential are recognized in a variety of ways — good grades in math and science, teacher recommendations, or if the student himself expresses special interest.

Even before school began in fall, 1977, the sponsoring companies hosted eight students during the summer. Instead of spending his or her time in the usual non-technical type of summer job, each student "shadows" an engineer at work and gained valuable exposure to the profession.

According to Mauro Reyna, assistant superintendent of the AISD and vice chairman of Austin TAME, the program will be expanded this summer, which "shows that all our time and energy is paying off."

Doug Lawrence, personnel manager at IBM, is chairman of the Austin division of TAME. And he points out that Gus Garcia, then school board chairman, was one of the original organizers. Garcia was instrumental in establishing TAME with the AISD.

In order to inform more people about engineering opportunities, TAME recently has completed a videotape showing engineering activities and actual minority engineering students and graduates at work. The tape will be available statewide for use in schools and for parent groups. TAME wants to reach not only the minority student, but also his family.

During the '77-'78 school year, the
TAME action committees have been working with high schools, tailoring activities especially for their own students. The activities can include "career days," special-interest clubs, special counseling and industry tours. Austin TAME members hope to expand the program to junior high schools.

In addition to identifying and encouraging high school students, Robottom provides information on scholarship funds to interested students. "Money is just not a problem" for the qualified minority student, Robottom said. The problem is getting this information to the high school student.

TAME is an Austin partnership that is working to help solve two national problems -- tapping the unused but valuable resource of minority engineering potential and opening up engineering and leadership positions to minority citizens.

The second major goal of Austin TAME is to ease the transition of the minority student to college, cutting the minority drop-out rate. Austin is lucky to have Austin Community College helping in this transition stage.

If a student wants to enter UT's College of Engineering, but didn't realize that soon enough to properly prepare in high school, ACC offers courses to fill in the gaps. The student then can go from ACC into UT engineering.

Jack Robottom, in addition to being the statewide executive director of TAME, is treasurer of the Austin chapter and the director of the Equal Opportunities in Engineering Program at UT. His office works with several aspects of the problem.

The students were Tony Maldonado, a Junior, and Gloria Crayton, a Sophomore.

"Before seeing Tracor," said Gloria, "not many people knew what engineering really was. Then we were allowed to go and see what they did; people seemed to really like their jobs and be happy. It made me feel I wanted to work there, too."

TAME is an Austin partnership that is working to help solve two national problems -- tapping the unused but valuable resource of minority engineering potential and opening up engineering and leadership positions to minority citizens.

And if TAME enthusiasm and determination plus favorable student response are any indication, it's a partnership that is headed for success.

© JUNE, 1978
GOLDEN-CRESCENT ALLIANCE FOR MINORITIES IN ENGINEERING
PARENT-STUDENT ORIENTATION
MAY 30, 1978 - 7 P.M. - VOCATIONAL SCHOOL

WELCOME - PURPOSE - INTRODUCTIONS

A. D. Cyphers
President, Golden-Crescent Alliance for Minorities in Engineering
Plant Manager, Victoria Plant, E. I. du Pont de Nemours & Co.

INVOCATION

Harold Cade
Principal, Patti Welder Intermediate School

BANQUET

NATIONAL ADVISORY COUNCIL ON MINORITIES IN ENGINEERING SLIDE PRESENTATION - "A GOOD PLACE TO START"

"ENGINEERING CAREERS - A LADDER TO SUCCESS"

Judy Wyatt - Du Pont Summer Pre-Engineering
Bernard Barela - Du Pont Summer Pre-Engineering
Sylvia Vasquez - Du Pont Co-Op
David Donald - Du Pont Division Engineer

THE GCAME PROGRAM

Dr. Roger Gee
Superintendent, Victoria C.I.S.D.

PARENTS ROLE IN GCAME

Harris Marr
Treasurer, Golden-Crescent Alliance for Minorities in Engineering
Manager, Southwestern Bell Telephone Co.

"MINORITY ENGINEERING: TODAY AND TOMORROW"

A. D. Cyphers

"KEY TO A SUCCESSFUL FUTURE"

Du Pont  Southwestern Bell  Union Carbide

APPENDIX C
MEMO TO: Mr. Edwin Murdoch, Chairman, El Paso AME
FROM: Executive Director
SUBJECT: Austin AME Industry-University-High School Program
DATE: April 13, 1978

After reviewing our files, I find no concise document which explains the Austin AME Program, so let me undertake to do it for the El Paso group.

At our initial organizational meeting, an associate superintendent of the AISD described the locations, facilities and ethnic ratios in the nine Austin high schools. Some were heavily Black, some heavily Hispanic, some more or less evenly attended and two were, effectively, all White.

It was decided, since all high schools had some minority students, all would be involved. It was further agreed by the (then) four industry participants (Tracor, IBM, TI and Motorola) that each company would "adopt" the two high schools nearest to them geographically (IBM took three schools).

At the suggestion of the school administrators, (we had already appeared before the Austin School Board, explained our purpose and received their support) we created in each high school a committee composed of one assistant principal, a math teacher, a science teacher, a counselor and 3-5 young minority engineers from the sponsor company. We found it useful to pay a personal call on each principal prior to organizing these committees.

The math and science teachers have identified about 250 minority students in the nine high schools whose abilities and motivation predict success in a technical career. Our engineers have met with all of these students, all have toured the host engineering installation at least once, and these companies have, together with the City of Austin, come up with over 100 engineering-related summer jobs. In addition TAME plans to sponsor up to 30 students, juniors in high school, who wish to take math and physics courses this summer at Austin Community College.

The University is hosting on April 15, a day-long exposition, luncheon and tour of laboratories for these high school students—a practice which UTEP also follows. We use our minority engineering students to organize and host this program.

We in Austin had no real examples to follow when we commenced last May. Very probably this was a good thing for us and the El Paso Alliance will very probably end up doing its thing in ways unique to it.
EL PASO ALLIANCE
FOR
MINORITIES IN ENGINEERING

Mr. Edwin Murdoch, Chairman
Mountain Bell Telephone Co.
L 48 500 Texas Street
El Paso, Texas 79901
915/452-4341

Mrs. Evelyn Bell
Ysleta ISD
8445 Valdespino
El Paso, Texas 79907
915/859-7971

Mr. Curtis Conrad
Texaco, Inc.
6500 Trowbridge
El Paso, Texas 79905
915/772-1433

Mr. Gus Gonzales
Facilities & Engineering
Fort Bliss, Texas 79916
915/568-6200

Mr. Wilson Knapp
Educational Service Center
Region XIX
P. O. Box 10716
El Paso, Texas 79997
915/799-3737

Mr. Hal Logan
Branch Manager
IBM Corporation
4191 N. Mesa
El Paso, Texas 79912
915/533-4981

Mr. Robert Peinado, PE
Peinado, Peinado & Navarro
Consulting Structural Engineers
1444 Montana
El Paso, Texas 79902
915/448-4468, 448-4487

Dr. Jack Smith
Dean, College of Engineering
University of Texas at El Paso
El Paso, Texas 79968
915/747-5460

Mr. Ken Thomas
El Paso ISD
6531 Boeing
El Paso, Texas 79925
915/779-4050

Mr. Oscar Valadez
El Paso Community College
432 Frederick
El Paso, Texas 79905
915/778-7117

Mr. George Yelderman
General Electric Co.,
215 N. Stanton, Suite 611
El Paso, Texas 79901
915/542-1803
# Engineering Colleges of Texas

**Freshmen (Minority) Enrollment**

**Fall, 1976 and Fall, 1977**

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**Total Increase (September 1, 1976-September 1, 1977)**: +149

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**Appendix E**
November 25, 1977

TO: BOARD - TAME
FROM: R. L. HANSEN - TREASURER - CHAIRMAN
BUDGET COMMITTEE

The Budget Committee met on November 8 with all members present: Jack Robottom, C. A. Rodenberger; Charles Reinke and Dick Hansen.

The following are the committees budget recommendations:

BUDGET, September 1, 1977, August 31, 1978

1. Salaries & Wages
   a. Director 50%  14160
   b. Secretary 50%  3000
   c. Technical Assistant 3000 20160

2. Film Production, Copying & Distribution 3500

3. Counselor Manual, Printing & Binders 1000

4. Travel
   a. Director - 15 trips in state @$100 1500
   b. Board & Invited Speakers 10 trips @$200 2000 3500

5. Organizing Seminars - Corpus Christi, Dallas, Beaumont, El Paso, Texarkans 12000

6. Printing - Newsletter 800

7. Miscellaneous Supplies, Equipment and Postage 1000

8. Regional Alliance Expenses 5000

TOTAL BUDGETED EXPENSE $46,960