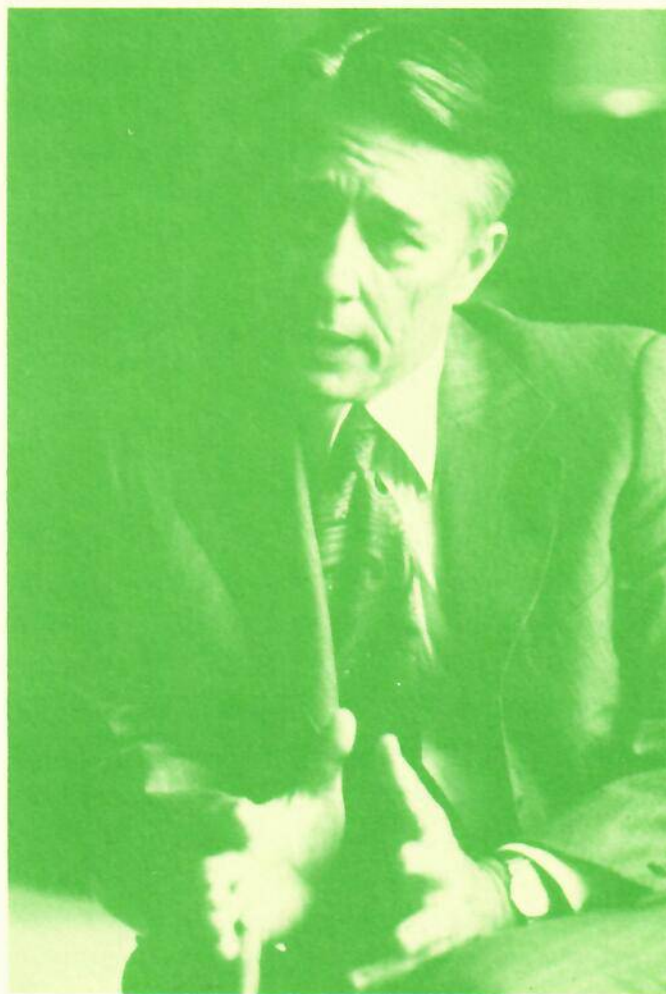


TEXAS ALLIANCE FOR MINORITIES IN ENGINEERING



ANNUAL REPORT 1978-79

Mr. Howard C. Kauffmann, President of Exxon Corporation and Chairman, National Advisory Council on Minorities in Engineering, discusses the NACME Program at the January, 1979 Southwestern Symposium on Minorities for Engineering in Austin. Mr. Kauffmann delivered the principal address at this TAME-sponsored event.

SUMMARY OF ACTIVITIES

The academic year 1978-79 saw both consolidation and growth in TAME, Inc. together with extension of its influence elsewhere than Texas.

Local alliances expanded their activities significantly, working primarily with and through the school administration and local industry in the ten cities in which TAME, Inc. now functions. During the three years of TAME's existence, freshmen minority enrollment has increased by 38% and we look for substantial gains in the future.

An organizational meeting for the Mid-Texas Alliance was held in Midland/Odessa in mid-May, 1979 and Mr. O. B. Harris, Regional Manager of ARCO Pipeline Co., was elected chairman. Organization of the Tyler and Lubbock Alliances has been deferred to the Fall of 1979 to accommodate school district schedules.

A 12-minute color videotape was made in Austin with the assistance of the University of Texas Department of Radio, Television and Film. 150 copies were made and have been widely disseminated throughout the Texas school districts, career centers, educational service centers and TAME chapters. At least thirty copies have been supplied, on request, to organizations outside of Texas.

At the request of the National Academy of Engineering's Committee on Minorities, TAME, Inc. with The University of Texas at Austin, organized and hosted in early January, 1979, one of four regional symposia being held around the country in 1979 to further the growth of local and institutional minority programs. Educators, engineering deans and industry representatives from eight states were invited to consider ways to increase local involvement and to create additional organizations like PRIME, MESA, TAME and others. We were honored to have as our keynote speaker Mr. Hastings H. Huggins, Jr., Director of Affirmative Action for the IBM Corporation. The principal address was given by Mr. Howard C. Kauffman, President of Exxon Corporation and 1979 chairman of the National Advisory Council on Minorities in Engineering. As a result of this symposium, local organizations to identify and recruit minority students are underway in Tucson and Phoenix, Arizona, Albuquerque, New Mexico, Denver Colorado and New Orleans, Louisiana.

At this symposium we honored our outgoing and founding chairman, Mr. Raymond F. Tickner of Exxon Corporation, USA for his invaluable leadership in the critical phases of TAME's existence and in particular, his effectiveness in advancing our interests with the Alfred P. Sloan Foundation to assure TAME's fiscal base.

The TAME, Inc. board scheduled its annual meeting to coincide with the National Academy Symposium. Mr. Peter M. Suarez of IBM Corporation was elected Chairman of the Board, Mr. Lawrence Marshall, Associate Superintendent of the Houston Independent School District remains President. Mr. Richard L. Hansen of Dow Chemical - U.S.A. becomes Vice President and continues as Treasurer. Mr. John S. Robottom, College of Engineering, The University of Texas at Arlington, continues as Secretary and Executive Director. New board members include: Dr. W. Lionel Craver, The University of Texas at El Paso; Mr. J. A. Rodriguez, Brownsville Independent School District; Mr. Edward L. Sample, Champlin Petroleum Company; Mr. Sam Madrid, Kelly AFB, San Antonio and Ms. Rebecca A. Turner, Gulf States Utilities Co.

Dallas Alliance for Engineers in Minorities in ENGINEERING CAREERS SEMINAR

EASTFIELD COLLEGE

SPONSORS:
DALLAS COUNTY COMMUNITY COLLEGE DISTRICT
DALLAS INDEPENDENT SCHOOL DISTRICT
SOUTHERN METHODIST UNIVERSITY
UNIVERSITY OF TEXAS AT ARLINGTON
ATLANTIC RICHFIELD
CONTINENTAL EMSCO
IBM CORPORATION
MOBIL OIL PIPE LINE COMPANY
ROCKWELL INTERNATIONAL
SOUTHWESTERN BELL TELEPHONE
TEXAS INSTRUMENTS
XEROX CORPORATION

MARCH 10, 1979

8:30 am CONTINENTAL BREAKFAST AND REGISTRATION
Fine Arts-Administration Building
Eastfield College, DCCCD

9:00 CONVENE FOR PLENARY SESSION
Performance Hall, Fine Arts-Administration
Building

WELCOME
Ms. Callie F. Struggs, Associate Dean,
Eastfield College

Dr. John D. Daigh, Chairman,
Mathematics and Engineering Division
Eastfield College

Mr. John S. Robottom, Executive Director,
Texas Alliance for Minorities in Engineering, TAME

Mr. Linus Wright, Superintendent,
Dallas Independent School District

9:50 PANEL DISCUSSION AND INDUSTRY PRESENTATIONS
Mr. Edward M. Whiteurs, Chairman,
Dallas Alliance for Minorities in Engineering,
IBM Corporation

Group A remains in the Performance Hall for a
panel discussion and takes a coffee break from
9:50 to 10:10

Panel
Members: Mr. Preston Johnson, Southwestern Bell
Mr. Spencer Charlton, Continental EMSCO
Mr. Louis Jenkins, Xerox Corporation
Mr. Rodney Thomas, IBM Corporation

Group B to participate in company presentations
in Campus Center and takes a coffee break from
10:40 to 11:00

PANEL DISCUSSION AND INDUSTRY PRESENTATIONS (Continued)

Industry Presentations:

ARCO Oil and Gas Company
Ms. Linda S. Gibbs
Mr. Leroy Richardson

IBM Corporation
Mr. Edward M. Whiteurs
Mr. Rufus Singleton
Mr. Billy Ratcliff

Mobil Oil
Mr. George Elsele
Mr. Chester Morris
Mr. Chuck Reinke

Rockwell International
Ms. Renita Dunn
Ms. Chris Shades
Mr. Al Nash
Mr. Chris Thomas

Southwestern Bell Telephone
Ms. Rita Baranco
Ms. Elida Diaz
Mr. Garrick Vester
Mr. Norm McNeil
Mr. Sam Jackson

Texas Instruments
Mr. George Berryman
Mr. Thurston Lee
Mr. Naru Williams

Xerox Corporation
Ms. Lois Sauervopf
Mr. Harold Bryant
Mr. Gil Castro
Mr. Hugh Devonport

11:00 Group A participates in company presentations
in Campus Center

Group B participates in panel discussion in
Performance Hall

12:00 to 12:45 LUNCH
Campus Center



Mr. A. D. Cyphers, Plant Manager, E. I. DuPont Co., Victoria, and Mr. D. L. Goris, Plant Manager, Union Carbide Co., Port LaVaca (chairman and vice chairman of the Golden Crescent Alliance for Minorities in Engineering) present awards at the May 11, 1979 year-end banquet and summer program kick-off. An outline of this typical program is provided (Appendix "E").





Mr. Hastings Huggins (left) of IBM Corporation delivers the keynote address to the Southwestern Symposium on Minorities in Engineering on January 8, 1979 at the University of Texas at Austin. Dr. John Hernandez, Dean of Engineering at New Mexico State University represented the National Academy of Engineering, a co-sponsor.



SOUTHWESTERN SYMPOSIUM ON MINORITIES IN ENGINEERING

January 8-9, 1979

Joe C. Thompson Conference Center
The University of Texas at Austin



SPONSORS

National Academy of Engineering
National Research Council, Committee on Minorities in Engineering
University of Engineering, The University of Texas at Austin
National Academy of Engineering, Inc.

- 12:00 Luncheon (Room 2-102)
Introduction of Luncheon Speaker: Dr. Andrew E. Salis, Dean, College of Engineering, The University of Texas at Arlington
Address: Dr. Herman B. Smith, Chancellor, University of Arkansas at Pine Bluff
- 1:30 p.m. Workshops:
W-4 (Room 2-110) Special Needs & Problems of American Indians
Moderator: Mr. George Thomas, Director, American Indian Program, College of Engineering, The University of Oklahoma
W-5 (Room 2-120) Special Needs & Problems of Hispanic Americans
Moderator: Mr. Robert Fennell, Executive Director, MESA Program, University of California at Berkeley
W-6 (Room 2-122) Special Needs & Problems of Black Americans
Moderator: Mr. LaVoy Spooner, Assistant Director, Committee on Minorities, National Academy of Engineering
- 2:15 Break: Video-tape: "You Can Get There From Here" (Lobby)
- 3:00 Reports of Major Ethnic Group Workshop Chairmen (Auditorium)
- 3:45 Workshops:
W-7 (Rooms 1-110 & 2-110, 2 Sections) Pre-College Programs
Moderators: Dr. Charles Rodenberger, Assistant Dean, College of Engineering, Texas A&M University, and Dr. Thomas L. Brown, College of Engineering and Applied Science, SUNY at Stony Brook
W-8 (Rooms 2-120 & 2-122, 2 Sections) Financing Pre-College & College Level Programs
Moderators: Mr. Garvey E. Clarke, President, NFMES and Mrs. Marie Steward, Recruiting Supervisor, E. I. DuPont de Nemours & Co., Inc.
- 4:45 Adjourn
- 6:15 Reception: Joe C. Thompson Conference Center Lobby
- 6:45 Dinner:
Introduction of Principal Speaker: Dean John Hernandez, College of Engineering, New Mexico State University
Address: Mr. Howard C. Kauffmann, President, Exxon Corporation; Chairman, National Advisory Council on Minorities in Engineering

SOUTHWESTERN SYMPOSIUM ON MINORITIES IN ENGINEERING

AGENDA

Monday, January 8, 1979
Thompson Conference Center

- 8:00 a.m. Continental Breakfast
- 8:30 Welcome: Dr. Earnest F. Gloyna, Dean, College of Engineering, The University of Texas at Austin—Auditorium
Dr. John Hernandez, Past Chairman, National Academy of Engineering, Committee on Minorities; Dean of Engineering, New Mexico State University
- 8:35 Introduction of Keynote Speaker: Mr. J. W. Geils, Engineering Director-Administration, American Telephone and Telegraph Co.
Keynote Address: Mr. Hastings H. Huggins, Jr., Director, Affirmative Action, IBM Corporation
- 9:00 TAME, Inc. "A Low-Budget/High Yield Program"; Mr. Raymond F. Tickner, Exxon Company, USA; Chairman of the Board, TAME, Inc.
"How The Austin Alliance Works"; Mr. Ken Cargill, IBM Corporation and Mr. Mauro Reyna, Austin Independent School District
- 9:45 Questions and Answers
- 10:00 Coffee
- 10:15 Workshops
W-1 (Room 2-110) Improving Pre-College Academic Preparation
Moderator: Mr. Lawrence Marshall, Associate Superintendent, Houston ISD; President, TAME, Inc.
W-2 (Room 2-120) Customizing a Retention Program for your Campus
Moderator: Dr. William E. Hogan II, Associate Executive Vice Chancellor, The University of Kansas
W-3 (Room 2-122) Industry's Role in Retention Programs
Moderator: Mr. Kenneth Saunders, Engineer, Kaiser Aluminum Co.
- 11:30 Reports of Workshop Chairmen (Auditorium)

Tuesday, January 9, 1979
Thompson Conference Center

- 8:00 a.m. Continental Breakfast (Lobby)
- 8:30 Call to Order: Dr. J. Parker Lamb, Associate Dean, College of Engineering, The University of Texas at Austin
Panel Presentation (Room 1-110)
"Trends in Industry/Academic Interaction"
Moderator: Dr. William Upthegrove, Dean of Engineering, University of Oklahoma
Panel: Mr. Richard L. Hansen, Dow Chemical, USA; Treasurer, TAME, Inc.
Dr. William Gross, Dean, College of Engineering, University of New Mexico
Mr. Harold Lichtenwald, Administrator, Business/Education Relations, Dallas Independent School District
Dean Austin E. Greaux, College of Engineering, Prairie View A&M University
- 9:20 Questions and Answers
- 9:30 IBM Film
- 10:00 Coffee
- 10:15 Workshops:
W-9 (Room 1-110) Motivation of Pre-College Students (2 Sections) Moderators: Mr. James L. D'Acosta, General Electric Co. and Mrs. Susan Scalfani, High School for Engineering Professions, Houston Independent School District (Room 2-122)
W-10 (Room 2-120) Administering a College Level Minority Program
Moderator: Dr. G. F. Paskusz, College of Engineering, University of Houston
- 11:15 Summary Reports of Workshops (Auditorium)
- 12:00 Luncheon (Room 2-102)
Introduction of Luncheon Speaker: Mr. Jimmy Shorty, College of Engineering, University of New Mexico
Address: Mr. Jaime Oaxaca, Vice President, Electro-Mechanical Division, Northrup Corporation
- 1:30 p.m. Adjourn
Presiding: Mr. John S. Robottom, Executive Director, TAME, Inc.; Director, Equal Opportunity in Engineering Program, The University of Texas at Austin

STATISTICS AND EVALUATION

As of the Fall, 1978, Texas colleges and universities enrolled 15.4% of the nation's minority engineering freshmen, and significantly, almost 30% of the nation's Hispanic freshmen. Enrollment data which TAME, Inc. has compiled since 1976 shows a 38% increase in minority engineering enrollment in Texas from 1976 to 1979 (Appendix "A"). We are examining the factors responsible for this increase and hope to measure TAME's contribution in some objective way, now that local alliances are functioning in all of the major population centers.

To further aid in assessment of our effectiveness, Dr. Stanley G. Ebner, Dean of Technical Studies at the University of Houston-Downtown (and chairman of the Gulf Coast Alliance for Minorities in Engineering) has initiated a study involving every school district in Texas with a student population of 10,000 or more. The Texas Education Agency has provided us with data (Appendix "B") showing total public school enrollments in Texas, by year and the total number of students taking algebra, geometry and trigonometry. The totals are not encouraging, and Dr. Ebner's study is intended to determine the ethnicity of students at these various secondary mathematics levels.

A study recently made at The University of Texas at Austin (Appendix "C") shows conclusively that students entering the College of Engineering with inadequate math backgrounds, i.e. required to commence their math sequence with M305G (Precalculus), column 2, are unlikely to perform adequately in the total engineering curriculum, "adequately" being a GPA of 2.5 or above. By comparison, those entering freshmen able to start their math sequence with M808A (Calculus I), column 1, were measurably better equipped for the total curriculum. Over the long term, TAME must work with the public school districts, the colleges of engineering, junior and community colleges and the profession to improve the unsatisfactory conditions that now prevail.

Dr. Ebner's study will almost certainly show a lower percentage of Black and Hispanic students completing high school physics and trigonometry than their Anglo peers. Once completed and carried forward from year to year, this study will provide a reasonably objective measure of TAME's effectiveness in persuading teachers, counselors, students and parents that able students should take these different, but essential, courses.

BUDGET AND FINANCE

At the March, 1979 Board Retreat at Lakway, an annual budget of \$82,500 was approved for TAME, Inc.'s FY 1980 (Appendix "D"). As with all non-profit organizations, TAME's tax-exempt status is of vital importance to our continued solvency. We were pleased to learn on May 24, 1979 that the District Director of the IRS, after a review of activities and finances for the advanced ruling period, has found us to continue as a qualified section 509(a) (i) organization. A copy of this letter may be obtained by writing to the Executive Director.

A major reason for our IRS qualification lies in the number and breadth of our support; from foundations, from industry and from public institutions.

Our supporters for the current year include, in addition to the Alfred P. Sloan Foundation and The University of Texas System:

- 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
- Mobil Oil Corporation
- Motorola, Inc.
- Tennaco, Inc.
- Texaco, Inc.
- Texas Eastern Corporation
- Ford Motor Company
- General Motors Corporation
- Shell Companies Foundation, Inc.
- Gulf Oil Foundation, Inc.

ENGINEERING COLLEGES OF TEXAS
FRESHMAN (MINORITY) ENROLLMENT
Fall 1976, 1977 and 1978

Appendix "A"

		TOTAL	MINORITIES	NATIVE AMERICAN	BLACK	HISPANIC	NET CHANGE
U. of Houston	1978	614	171	3	94	74	+68
	1977	498	103	3	59	41	
	1976	406	141	3	77	61	
Lamar U.	1978(est)	380	40		40	5	+7
	1977	372	38		34	4	
	1976	340	20		13	7	
Letourneau Coll.	1978	65	2		2		-1
	1977	62	3			3	
	1976	63	0				
Prairie View A&M	1978	258	258		258		-2
	1977	260	260		260		
	1976	200	200		200		
Rice U.	1978	171	15		11	4	-8
	1977	186	23	1	9	13	
	1976	228	22		11	11	
St. Mary's	1978	44	20		1	19	+5
	1977(est)	50	15			15	
	1976	42	12			12	
SMU	1978	193	30		14	16	-11
	1977	201	41	2	14	25	
	1976	(not available)					
Texas A&I	1978	211	76		5	71	+10
	1977	191	66		9	57	
	1976	188	55		1	54	
Texas A&M	1978	2,500	107	9	18	80	+56
	1977	1,766	51	1	4	46	
	1976	1,608	32	5	4	13	
UT-Arlington	1978	661	31	2	18	11	+4
	1977	488	26	2	14	10	
	1976	482	29	1	18	10	
UT-Austin	1978	1,219	212	3	58	151	+30
	1977	1,108	182	2	45	135	
	1976	1,100	166	1	53	112	
UT-El Paso	1978	566	268			268	+28
	1977	512	244		4	240	
	1976	480	186		1	185	
Texas Tech	1978	967	46	2	9	30	+11
	1977	933	35		8	27	
	1976	525	29	3	11	15	
Trinity	1978	66	6			6	-2
	1977	57	8			8	
	1976	40	8		3	5	

TOTAL INCREASE OVER 1976 (September 1, 1976 - September 1, 1977) +149

(September 1, 1977 - September 1, 1978) +195

Appendix "B"

Texas High School
Student Enrollment 1977-78

<u>Course</u>	<u>Total Enrollment</u>
Algebra I	105,631
Algebra II	20,165
Geometry	75,154
Trigonometry	15,633

<u>Grade</u>	<u>Total Enrollment</u>
1	245,588
2	226,040
3	219,578
4	210,402
5	209,451
6	212,658
7	228,962
8	234,303
9	236,698
10	215,536
11	187,033
12	158,946

RESULTS OF COMPARISONS BETWEEN M305G (PRE-CALCULUS) VS. STUDENTS TAKING CALCULUS AS A FIRST MATH COURSE;

FRESHMEN STUDENTS ENROLLING IN ENGINEERING IN THE FALL OF YEARS 1974-1977

Criterion Variable	5			
	1	2	3	4
	Mean Score for Students Enrolled in M305G	Mean Score for Students Enrolled in M305G	Mean Score for Those Receiving A or B in M305G	Mean Score for Those Receiving C in M305G
SAT-Verbal	518.00 (N=1594) [*]	451 (N=618)	452 (N=321)	456 (N=163)
SAT-Math	626.00 (N=1594)	529 (N=618)	542 (N=321)	521 (N=163)
SAT-Total	1144.00 (N=1594)	980 (N=618)	994 (N=321)	977 (N=163)
Math 1**	634 (N=1397)	504 (N=524)	515 (N=281)	497 (N=145)
High School Rank	83 (N=1459)	77 (N=567)	80 (N=295)	74 (N=153)
Cumulative Grade Point Average	2.66 (N=1603)	2.05 (N=623)	2.38 (N=324)	1.94 (N=164)
M305G		2.43 (N=613)	3.43 (N=324)	2.00 (N=163)
M608EA	2.04 (N=148)	1.53 (N=17)		1.40 (N=135)
M608EB	1.84 (N=107)	2.07 (N=14)		0.43 (N=126)
M325	2.54 (N=81)	0.67 (N=3)		
M808A	2.65 (N=1346)	1.79 (N=487)	2.19 (N=290)	0.75 (N=56)
M808B	2.64 (N=1220)	1.79 (N=324)	2.08 (N=223)	0.86 (N=14)
PHY305	2.17 (N=109)	1.61 (N=152)	2.00 (N=64)	0.90 (N=39)
PHY403K	2.69 (N=1384)	1.75 (N=437)	2.10 (N=261)	0.92 (N=47)
PHY403L	2.68 (N=1207)	2.21 (N=300)	2.43 (N=211)	1.59 (N=17)
EM306	2.63 (N=689)	1.56 (N=197)	1.80 (N=133)	0.88 (N=8)
EM311	2.45 (N=497)	1.76 (N=85)	1.93 (N=71)	0.50 (N=4)
EM314	2.53 (N=413)	1.68 (N=62)	1.71 (N=51)	4.00 (N=1)

* N = Sample Size

** CEEB Math I Test

Course Description

M305G Functions Coord. Geom. PHY403K&L Engr. Phys.

M608A&B Calculus w/Anal. Geom. EM306 Statics

M325 (Not Offered) EM311 Dynamics

M808A&B Calculus I&II EM314 Mech. of Solids

PHY305 Pre-Engr. Physics

TAME, INC.

Approved Budget
FY 1980

(September 1, 1979 - August 31, 1980)

1. Salaries & Wages		
a. Director 60%	\$17,200	
b. Secretary 50%	4,000	
c. Technical Assistant	<u>4,000</u>	
		\$25,200
2. Travel		
a. Director, 30 Trips in State		
2 \$75, 2 Trips Wash. & NY		
@ \$300		2,850
b. Board & Invited Speakers,		
In and Out of State		8,000
3. 2 Annual Meetings, Board & Local		
Chairman @ \$2,000		4,000
4. Organizing Seminars		
Lubbock, East Texas & Freeport		6,000
5. Engineering Demonstration Exhibit		
(portable)		10,000 (Special Grant)
6. Regional Alliance Expense		
a. Valley	2,000	
b. Houston	2,000	
c. San Antonio	4,000	
d. Austin	2,500	
e. Dallas	1,000	
f. Corpus Christi	3,000	
g. Beaumont	1,500	
h. El Paso	2,000	
i. Victoria	4,000	
j. Fort Worth	<u>1,000</u>	
		23,000
7. Newsletter & Printing		2,500
8. Misc. Supplies, Equip. & Postage		1,000

\$82,500

GOLDEN-CRESCENT ALLIANCE FOR MINORITIES IN ENGINEERINGMAY MEETING

The final meeting for the 1978-79 school year program will be held May 11, 1979 at the Victoria Vocational/Technical School, 7-9 p.m. The following is the program outline:

Introduction - S. Groll & E. Smith Presenters

- Group I - "College Preparation" - 9-12 Graders
(James & Marie Martin)
- (A) Film on BEOG Grant
 - (B) "National Funds for Minorities in Engineering" Explained
 - (C) College Admission Procedures
 - (1) Room Reservations
 - (2) SAT & ACT
 - (3) Applying for Admission
 - (D) MITE Program
 - (E) JST & Other Summer Programs
 - (F) High School Curriculum for Pre-Engineering Students
 - (G) Questions & Answers

NOTE: A counselor from each high school should serve as group consultant.

- Group II - "The World of Engineering" - 6-8 Graders
(H. Aschen & B. Sikes)
- (A) Film "Piece of the Action"
 - (B) Overview of the 1979 Summer Program
 - (C) Jr. High School Pre-Engineering Preparation
 - (D) Highlights of MITE Program
 - (E) Highlights of JST Program
 - (F) Questions & Answers

NOTE: Consultants for this group will be chosen by Sikes and Aschen.

- Group III - "Positive Strokes" - Parents
(J. Mathis & C. Cola)
- (A) Film "Conceive It, Believe It, Achieve It"
 - (B) Overview and purpose of GCAME
 - (C) Importance of Parent Participation and Motivation
 - (D) Function of Role-Models
 - (E) Jr. & Sr. High Pre-Engineering Curriculum
 - (F) MITE Program
 - (G) JST Program
 - (H) Financial Aids
 - (I) Questions and Answers

NOTE: Consultants for this group will be chosen by Mathis and Cola.

PROPOSED SUMMER PROGRAM - 1979

The 1979 GCAME six-weeks summer program will be held June 11 - July 20, 1979. Locations will be Stroman High School - Victoria and Calhoun High School - Port Lavaca, TX. Four teachers for Victoria and two teachers for Calhoun will be employed to teach in the program. Students in grades 6-12 with high aptitudes in Science and Math will be enrolled in the program. Program outline is as follows:

DATE: June 11 - July 20, 1979 (6 Weeks)

TIME: 8:30 - 11:30 Instruction 11:30 - 12:30 Planning

FIELD TRIPS: Five for the summer

BASIC CLASSROOM CURRICULUM: TPE Materials & Stony Brook Materials

PROJECTS FOR COMPETITION (Engineering Olympics - July 20, 1979)

- (1) KITE - Team of two - 4th week assigned
5th week - Due Tue
Aschen to develop guidelines
- (2) Toothpick Bridge - Team of two - 2nd week assigned
July 2 or 3 - Due
J. Martin to develop guidelines
- (3) Plaster of Paris Beam - Team of two - 3rd week assigned
July 11 - Due
E. Smith & S. Groll to develop guidelines
- (4) Electromagnet - - June 15 assigned
June 19 - Test
Aschen & Sikes to develop guidelines
- (5) Drafting Skills - Metric 500 Contest - 1st two weeks assigned
Last week - Due
6 hrs - Classroom Instructions
1 hr - Introduction
S. Groll to develop guidelines
- (6) Silent Tower - E. Smith & B. Sikes
- (7) Brain Storming - M. Martin

AWARDS

2 "Engineering of the Year Awards" - Mathis
Ribbons for 1st, 2nd, 3rd places & honorable mention - Mathis
Certificates for completion of program - Cola

SUMMER OLYMPICS

Date: July 20, 1979
Place: Du Pont DEAA Park
Time: 2-6 p.m. - Olympic Competition
6-7:30 p.m. - Dinner
Invitations: Parents & VIP's - K. Nesbitt
Media Coverage: J. Mathis
Food: K. Nesbitt
Drinks: J. Mathis
Park Reservations: J. Mathis
Program Coordinators: S. Groll, C. Cola, J. Mathis

MATERIALS - For classroom use

Aschen & Sikes - Port Lavaca
M. Martin, E. Smith, J. Martin, S. Groll - Victoria

NOTE: Each group will be responsible for getting materials.

ENGINEERING CONSULTANTS

Requested from C. Cola or J. Mathis no later than a week in advance.

ROLE MODELS

- (1) 3 contacts with students during the summer.
- (2) Make a home visit to all new students enrolled in the summer program prior to the start of the program.

NOTE: Send a complete list of names and addresses of new students to C. Cola or J. Mathis.

TRANSPORTATION

K. Nesbitt and J. Hunt

**OFFICERS AND BOARD
OF DIRECTORS
JULY 1, 1979**

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Manager of Community Relations
& Communications
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Vice President, Treasurer & Director
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Mr. Joe A. Rodriguez

Director
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Mrs. Mildred Rucker, Senior Counselor at Austin's Reagan High School, and five of her TAME students collaborated with the Austin public relations firm, The Advertising Department, which contributed its services, on this ad for TAME's specialized product.

It's A Jungle Out There...

... for the minority high school student. The competitive job market, the lack of career information, the high cost of college . . . all conspire to turn the world outside the classroom into a jungle. We're helping **TAME** that jungle.

TAME stands for Texas Alliance for Minorities in Engineering. We're a non-profit organization dedicated to increasing Texas' minority representation in the engineering field.

Although America's technological society needs more engineers, we're leaving untapped a valuable source of engineering potential . . . our minority groups. Blacks and Mexican-Americans comprise approximately 40 percent of Texas' school-age population, but represent less than 15 percent of the state's engineering school enrollment.

TAME has launched a unique state-wide attack on the problem.

We work with high schools and colleges to identify minority students with engineering aptitude and to arrange engineering-oriented opportunities: counseling, career-days, clubs, plant tours, internships, special courses, tutoring, and scholarships.

Contact **TAME** if you are (or know) a minority student who'd like information on engineering careers.

Together, we can **TAME** that jungle.

TAME 
TEXAS ALLIANCE FOR MINORITIES IN ENGINEERING

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