

# ◆ NATIONAL TECHNICAL NEWS ◆

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## Carrying the Vision Forward with Change

by

Katherine W. Coleman, NTA President

I am sure that there are as many answers as there are readers. The NTA Logo - sure. But there is more! And with that in mind, I entreat each of you to join me, the National Board, and Executive Directors in continuing the Vision with change. While the NTA remains the oldest organization for minorities for the sciences, engineering, and technology, it is time that we think in terms of being a "technical society".

We are committed to carrying the vision forth in this administration with change in mind, to encompass the needs of our professionals, students, local and international communities. How? Through (1) membership buy in; (2) collaborative partnerships with universities and other technical organizations; (3) new and better corporate relationships and international chapter development. While there are people working at the National level in these areas, members are encouraged to provide input and feedback through the Regional Directors.

There are thousands of names in the database, and chapters that are faithfully executing local programs, and then there are members who are wondering when there will be changes at the "National". Well, it begins now. Will you be part of the change? Change is painful but necessary. Delegates worked feverishly to complete a slate of officers who would serve this program year, and who are fully committed to increasing (1) membership involvement in the organization and (2) communication at all levels, especially between the National office and local chapters. For too long, chapters have not been actively involved in the decisions that represent what we as an organization are built on -- integrity, honesty, commitment, and service.

The whole represents the part and the part represents the whole as we embark upon

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**MEMBERSHIP  
NEWSLETTER**  
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## **Conference Report** **71st National Technical Association Conference** **"Creative Beginnings for the New Millennium"** **4-6 November 1999**

The 1999 Annual Conference of the National Technical Association was held November 4-6 at the Crystal City Hilton, Arlington VA. A pre-conference meeting of the Past Presidents was held on Wednesday, November 3. Conference attendees were joined by scientists and engineers from NASA Goddard Space Center on Thursday morning, as they visited schools in Washington DC to meet with and talk to students about careers in science and technology.

The Official Opening Session was held at lunch on Thursday with Mr. Edward Taylor, one of the past presidents, as keynote speaker. The afternoon featured an Education Initiatives Panel with Dr. Elvira Doman as the Moderator.

The first Professional Technical Session followed, concurrent with the Delegates meeting. The delegates elected new officers, listed membership benefits they would like to receive and discussed ways of increasing membership. Proposed membership benefits include: a membership certificate for new members; a membership card for all members; regularly published Journals and newsletters; a membership pin; an Internet job bank; a scholarship and fellowships database; a membership directory; more chapter news included in the journal and newsletters.

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The Board of Directors meeting was held immediately following the delegates meeting. The board discussed the operational status of the national office, the financial status of the conference, the installation of new officers, and the transition to the new leadership.

**Reception and Lecture**

Dr. Kathleen Prestwidge, Professor Emeritus of Biology, Bronx Community College, discussed effective use of community access TV. Hattie Carwell discussed the development of a Museum of African American Technology (MAAT) Science Village, a science museum to be opened in Oakland in 2000. It will embrace the ancient Kemetic principle of MAAT, a holistic view of the laws of nature, of how things relate to each other.

**Small Business Issues Panel**

Ms. Fredlee of the SBA discussed management and financing of small business, noting that the majority of businesses that fail do so because of a lack of management, not a lack of money. Jack Garrett of SENTEL Corp. and Edward Waters of AED, Inc. discussed their successful business strategies. SENTEL specializes in software development, and engineering and software services; AED, Inc. works primarily in telecommunications.

**Membership Luncheon -  
Marketing Your Skills Workshop**

Mr. Frank T. Davis walked the group through the SF171 form and how best to use it to present oneself when applying for government jobs. His suggestions apply equally well to the private sector.

**Undergraduate Technical Session I**

Health Issues for the New Millennium Panel Discussion

Dr. Rena Boss-Victoria discussed the proliferation of AIDS in the African-American, its prevention and treatment. Dr. Charlene Flagg gave a presentation on the "Umoja Program," a health education and maintenance program operated by the University of Michigan, which has had astounding results in getting families involved in maintaining good health through healthy lifestyles, incorporating nutrition and exercise.

**Corporate Recruiter Panel and Discussion**

Recruiters from the US Patent and Trademark Office, Westinghouse Savannah River, NASA, and Ford Motor Co. presented information on opportunities within their organizations. They also had booths at the Technical Career Opportunity Fair.

**Professional Technical Sessions**

Technical papers presented by professional scientists and engineers were in three areas: Computer Science and Information Systems; Atmospheric and Space Sciences; and Materials and Physical Sciences.

**Student Technical Sessions**

Three graduate students and 15 undergraduate students presented technical papers. Cash awards and certificates

were presented to those judged to be the best presentations.

Nine middle school and high school students gave technical presentations. Awards were given for the best presentations.

**NTA Business Meeting**

The new officers were announced at the Business Meeting. A report from the November 3rd Past Presidents meeting, "NTA Strategies for the New Millennium" was reviewed and discussed. Chapter reports from Houston, Baltimore and Hampton Roads were presented.

**Awards Banquet**

NTA DC Chapter President and current Co-Executive Director Jimmy Harris gave the keynote address, on "Commitment." Awards were presented for the best student presentations, and the NTA Charles E. Price Scholarship was awarded. New officers were installed.

**1999-2000 Board of Directors**

President	Katherine W. Coleman (Houston)
Immediate Past President	Garry A. Harris (Atlanta)
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**See Pages 13-15 for More NTA Conference News and Photos!**

**Past National Officers Meet At Conference**

By request of the Co-Executive Directors, Gil Haynes and Jim Harris, past National Officers attending the NTA 1999 Conference met in "retreat" on November 3, 1999, in the role of an Advisory Board. The respondents to the invitation were charged with a daunting task: "posture our organization for the new millennium."

The Co-Executive Directors told the group "the organization is in need of a "business plan" that will serve as a roadmap for the organization in the years to come." The goal of the retreat was to develop a framework that will serve as a roadmap for success in the new millennium. Dis-

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the new millennium. It is not difficult to grasp the Vision for the National Technical Association -- if you have heart. You've got to have heart! Some 79 years ago Mr. Charles Duke had a vision and had the heart and fortitude (along with others) to pursue the vision. I'm thankful. How about you? There are probably hundreds of reasons that one can come up with to resist change expanding from "we've never done that", "it's not policy" to "I'm all for it but". We give no clout to arguments against change. The state of the Minority Communities throughout these United States demands that we be proactive, and provide the technical resources to members and students, as well as the communities in which we live.

When I talk with the likes of Dr. Kathleen Prestwidge, John Thompson, Catherine Coleman Johnson, and Ed Taylor (who gave such a profound opening speech at the '99 conference), I am re-charged, re-inspired and re-committed again. These members and others represent our beginning. When the students come to the conference and leave with scholarships because they possess a 4.0 academic average, and monetary awards for outstanding science projects and technical papers, I am refreshed and hopeful. Hopeful that NTA will live on long after I'm gone. Our founding fathers would no doubt be pleased to see that despite organizational struggles over the years, The National Technical Association remains the oldest minority voice in North America!

In reading 1999 chapter reports, I see that we all engage ourselves in meaningful technical outreach programs within our cities of abode. Maybe not with the same name, but what's important is that the work is being done.

Dear members, I need you, the Board needs you and the National Technical Association is needed the world over! We are the village. So let us **all** rise to the challenges in respect to the minority student and technical professional. ***In Unity there is Strength!***

Networking is important, but it doesn't happen without communication and commitment. I am initiating the networking and communication by calling Presidents and Chairpersons to talk with them one on one. Oh, I know you're probably saying that all this sounds good, especially on paper. But, I will tell you this is my commitment: to do the best with what God has given me, and to stretch the Board of Directors, Executive Directors, and others who have already committed to the NTA, including Corporate Sponsors.

The goals of this administration are to (1) stabilize National offices and make NTAONLINE the chief resource for membership and organization information; (2) improve member and chapter recognition; (3) Develop corporate relationships that are groomed and maintained throughout the year; (4) communicate to chapter presidents reporting guidelines and requirements and enforcement; (5) re-establish fiduciary responsibility and accountability; (6) re-engineer administrative processes where necessary; (7) improve professional mentoring for NTA student members; and (8) establish a minimum of three international chapters. With your

help, these goals will be reached-- making the National Technical Association **the Premier International Voice for Minority Technical Professionals!**



**Incoming NTA President Katherine Coleman, and Immediate Past President Garry Harris, at the 1999 NTA Conference in Arlington, VA.**

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discussion centered on vision, fundamental organizational precepts (purpose and objectives), impact of new technologies (e.g., Internet), membership services and development, organizational structure, and marketing strategies.

The full-day retreat was a resounding success, and resulted in an excellent "framework for the future." The preliminary framework was presented to the Board at the Conference and was well received, raising many questions and concerns.

By request of the Board, an in-depth presentation was delivered to the new Board of Directors during their meeting in Houston on January 29, 2000, at the Hilton - Hobby Airport.

### **The National Technical Association- Greater Albuquerque Chapter Year End Report for 1999**

Members of the Greater Albuquerque NTA chapter participated in several activities during the fiscal year of 1999. In many of these activities the NTA chapter in Albuquerque was a sponsor for them. Still, NTA members served as mentors, advisors, or coordinators for the activities listed below.

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#### **Sponsor of Fisk University Reception**

On December 10, 1998, NTA was one of the sponsors of a reception for Fisk University at the Wyndham Hotel Airport in Albuquerque. The attendees of this reception consisted of students, parents, NTA members, Albuquerque school administrators, the Vice President of Fisk University, the Admissions Director of Fisk University, the president of the Albuquerque NAACP chapter, and the chairman of the Educational Programs committee of the Albuquerque NAACP chapter. Presentations on Fisk University were made at the reception. Also, on December 11, 1998, NTA members coordinated high school visits for the Admissions Director of Fisk University to talk to students at Albuquerque High School, Highland High School, and Victory Christian schools in Albuquerque about the importance of a college education and about Fisk University. As a result of this event, scholarships were awarded to students. During this event tours of facilities at Sandia National Laboratories were also provided on December 11, 1998. These facilities were the National Solar Tower Test Facility, the Technology Ventures Corporation, the Plasma Materials Test Facility, and the Nuclear Energy Technology Programs Facility.

#### **Kirtland Air Force Base Black History Month Program Sponsor**

The Black History Month committee of Kirtland Air Force Base hosted various events during Black History Month. Some NTA members were on this committee. Also, the NTA chapter in Albuquerque was a sponsor for a program that occurred on Kirtland Air Force Base and participated in the Black History display that was on the Kirtland Air Force Base as well. Items that NTA members donated for the display were books on Black scientists, pictures, and posters. This committee also hosted a Black History Month Essay Contest in which students from Albuquerque competed. Members of NTA assisted in the planning and coordination of this competition, also.

#### **Words of Wisdom**

Words of Wisdom were sent through daily electronic mail messages to NTA members all across the nation and to others from a member of the Greater Albuquerque NTA chapter during the months of January, February, and March 1999. These Words of Wisdom consisted of quotes from famous African Americans and Africans, and they also consisted of African proverbs.

#### **SHADES College Tour**

Students from the group SHADES (Sisterhood, Humanity, Action, Direction, Education, and Service) toured the college campuses of Fisk University, Tennessee State University, Meharry Medical College, Atlanta University Center, Georgia Tech, North Carolina A&T, Vanderbilt University, and Hampton University during March 26 to April 4, 1999. From these tours, students learned about these universities, about degree programs, and about the college campus environment. During this time they also met with NTA member Wanda Pierson and discussed the Georgia Tech Space Consortium. The Albuquerque chapter of NTA was a sponsor in this event and NTA members also served as

planners and mentors.

#### **SAT Preparatory Course**

During the timeframe of October 1998 to May 1999, NTA members and volunteers worked with the group SHADES to prepare and learn skills for taking the SAT test. The instructor of the course is an NTA member. The ages of the participants of the course ranged from 13 to 15. All of the participants took the SAT test in May 1999 and scored very well on the test.

#### **NAACP ACTSO**

During the timeframe of January 1999 to July 1999, NTA members served as Science Fair Judges, mentors, and advisors to students who participated in the NAACP Academic, Cultural, Technical, Scientific Olympics (ACT-SO) program. A member from NTA was a judge for the Local ACT-SO Science Fair competition that occurred on Saturday, April 17, 1999.

#### **ACT College Preparatory class**

The SHADES group sponsored an ACT test preparatory class. Two NTA members are mentors to the group. A member from NTA taught the course to the participants from SHADES and to other students from various middle schools and high schools in Albuquerque. The class took place at the Department of Energy's Energy Training Complex on Saturdays from 9:00 am to 11:00 am on September 11, 18, 25 and on October 2, 9, and 16.

#### **Current and Future Activities**

##### **Technical Papers Submitted from Albuquerque Students**

Two students from Albuquerque, Gabriella Hernandez and Leroya Hernandez, submitted papers on October 15, 1999 for the NTA Student Technical Paper Competition. The title of Gabriella Hernandez's paper is "Thermal Ortho-Silicate Insulation for Solid Oxide Fuel Cells." The title of Leroya Hernandez's paper is "Where Are Black Teens in the Bioethics Dialogue?" Members of the Albuquerque NTA chapter will serve as advisors and mentors to these students.

##### **University of New Mexico Regional Science Fair Mentor**

The University of New Mexico sponsored a regional science fair on October 21, 1999. A Greater Albuquerque NTA member served as a mentor to students for this event.

#### **Websites**

Members of NTA and volunteers will work with students on developing websites during the fiscal year of 2000. Through this activity students will learn how to design websites. They will also learn more about computer technologies.

#### **NTA Day in School**

Members of the Albuquerque NTA chapter will speak to students from Highland High School on Saturday, October 30, 1999.

#### **Scholarship Seminar**

A scholarship seminar for students has been scheduled for November 20, 1999. This seminar is to be an informational workshop for parents and students. Members from NTA will conduct the seminar. Many of the participants from the ACT Preparatory course as well as other students will attend this workshop.

## NTA Baltimore Chapter Quarterly Highlights

The Chapter sponsored a bus trip for students from Southern High School in Baltimore to visit the Smithsonian Institution in Washington, DC on October 28, 1999.

The Chapter held a 3T Mentor Workshop at Gwynns Falls Elementary School on September 30, 1999 in Baltimore. Suggestions were discussed of activities the 3T program could pursue to assist in improving the knowledge base of students in science and mathematics. Three NTA members, 17 teachers, and 19 students were in attendance.

The Baltimore Chapter conducted a 3T computer workshop at Matthew A. Henson Elementary School on October 28, 1999. Mrs. Shirl Byron, Project Coordinator of the NRTS program at Morgan State University, was the featured speaker. There was also a teacher training session entitled "Accessing the World Wide Web Site on the Internet". Four NTA members, 9 teachers, and 23 students were in attendance.

The Baltimore Chapter conducted a training session at Southern High School on November 18, 1999. The training session was on how to access the Worldwide Web Site on the Internet. Five NTA members, and seven teachers were in attendance.

The Baltimore Chapter conducted a 3T Christmas breakfast workshop at Morgan State University on December 18, 1999. There was a special presentation on computer applications by Mr. Ernie Odom, a computer specialist for Morgan State University's Center for Excellence in Mathematics and Science Education. Mr. Odom is also a computer columnist for the Baltimore Afro-American Newspaper. There was also a presentation by Mrs. Wyllona E. Harris on the success of the annual mathematics contest by the Washington, DC chapter.

John Thompson, Fred Oliver, and Bill Lupton represented the local NTA chapter at a video teleconference sponsored by MU-SPIN and NASA at Morgan State University, December 9-10, 1999. The conference had several speakers talk on opportunities for minority universities to become involved in space research.

## NTA Hampton Roads Chapter Report for the 1998-1999 Year

The National Technical Association Hampton Roads Chapter goals for this year were to continue past programs which have been successful, implement new ones, raise awareness among the community and our constituents of who we are and what we do, and raise funds for our scholarship program. We enjoyed some measure of success at each of these goals.

### Sanford Elementary School, Newport News

We were asked to provide positive, Black male role models for a group of at-risk fourth grade boys. Many of

these boys have very troubled lives outside of school. They meet together with a teacher and a guidance counselor for one period each week. Each week during the spring quarter we sent men to meet with these students. The students met and talked to chemists, engineers, Air Force officers. The highlight of the program for them was getting to ride in a "humvee" (HMMWV- High Mobility Multi-Wheeled Vehicle). One of the boys who always wanted to grow up to be a professional wrestler told his teacher he now wants to grow up and work at NASA. The program is continuing this fall. The boys visited the Virginia Air and Space Center where they met and had lunch with Astronaut Leland Melvin, a former member of our chapter.

### Second Annual NTA Tennis Open

We held our second annual tennis tournament in September, with more than 50 players participating, 20 individual sponsors and 7 corporate sponsors. The goal is to endow our scholarship fund to the point where we can award one or more four-year renewable scholarships to local students who pursue technical degrees in colleges or universities. We are not there yet, but the Open did raise money for the scholarship fund.

### SAT Tutorial

We held our annual SAT Tutorial in the March and April, leading up to the April test date. Seven NTA members and about 20 students participated one night a week. We provided tips for taking the test and improving one's score, practice tests, and help with solutions.

### Mathematics Contest

Our thirteenth annual Mathematics Contest was hosted by Norfolk State University. The students in grades 7-12 were given an SAT-style math test, with younger students taking the basic test and more advanced students taking the advanced test. They were given a tour of the computer science department and an opportunity to work on the computers, with Internet sites developed specifically for them. They were treated to lunch, addressed by Phil McNeil, Chairman of the Math Department. All students received certificates of participation; cash prizes were given to the highest three scores on each test, the highest score for each grade. The highest scoring school was also recognized.

### Science Fairs

Several of our members served as science fair judges at local schools, and at the Hampton and Newport News City-Wide Science Fairs.

### Bethel Manor Elementary School Career Day

Three of our members participated in the Career Days at Bethel Manor Elementary School where they talked to approximately 200 students about engineering careers.

### Peninsula Engineers Council

We are one of 20 organizations who are members of the Peninsula Engineers Council and meet monthly to plan joint activities. Each year the Council selects and awards the Peninsula Engineer-of-the Year. We nominated Dr. Christine Darden for the award this year; sadly, she was not selected.

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### **National Engineers Week Education Day**

Each year the Peninsula Engineers Council holds Education Days at NASA Langley Research Center during Engineers' Week. All local schools are invited to attend. We set up our display and talked to about 300 students over the two days on NTA and careers in engineering.

### **Tuskegee Airmen, Inc.**

We sponsored a talk at NASA Langley by two members of Tuskegee Airmen, Inc. in June. The two had served in the Army Air Corps during WWII as part of the Tuskegee Experiment. They shared their experiences during and after the War with an audience of about 100 people, including about 40 NASA Summer High School Apprentice Research Program (SHARP) students. Both gentlemen continued to serve during the Korean and Vietnam conflicts. They also talked about the Tuskegee Airmen, Inc., which not only continues to tell the story of the Tuskegee Experiment, but also encourages our young people to pursue aviation and aerospace careers.

One of our members was honored to spend a week in Palm Beach County with seven of the original Tuskegee Airmen and Airwomen at the invitation of the School Board. The group talked at several schools, civic groups, and a juvenile detention center about the Tuskegee Experience and about technical careers, particularly in aviation and aerospace. Our member felt that she was able to bridge the generations between the WWII veterans and the students, and shared how they had set the example opened the doors for her; she was carrying on the legacy, and it is up to the youth to continue to carry it forward.

### **Federal Women's Program Employee of the Year Award**

Two of our members were nominated for this award given to employees of NASA Langley Research. The winner was Angela Blayton, one of our long-time participants.

### **Megagenesis**

This program is sponsored by the Zeta Lambda Chapter, Alpha Phi Alpha, Inc. The local area students are invited to a high school where they are given a motivational/educational talk, the opportunity to talk to college representatives and prospective employers, and to visit any of 40 career workshops. We have participated each year by presenting a workshop on careers in engineering and science. We talk to between 30 and 100 of the 800 or more students who attend the program.

### **Virginia Air and Space Center**

Our members spoke to the public, primarily students, on two Saturdays during Black History Month about careers in science and engineering.

### **NSU Student Symposium**

Our chapter held its first Student Symposium in 1980.

This year we participated as judges in a symposium for Norfolk State Students in Math and Computer Science. The students are required to complete and present a senior research project; prizes are awarded for the best projects and presentations.

### **Our Members Move On; We Party**

We bade fond farewells to two of our members this year. Dr. Woodrow Whitlow left the area to become Director of Research and Technology at NASA Glenn Research Center in Cleveland. Leland Melvin left to join the NASA Astronaut program. Those were two great going-away parties. And we held our second annual summer beach party. All three events were well attended and a lot of fun!

## **National Technical Association – Houston Chapter Year End Report – 1999**

The National Technical Association Houston Chapter goals this year were to follow the NTA's Constitution. The constitution, in part, gave its purpose to encourage minority youths to participate in the sciences and mathematics. To achieve this goal, the Houston Chapter members visited local schools for career fairs, science competitions, math competitions, substitute teaching, and regular classroom visits. The chapter members were dedicated throughout the year and interfaced with many students. The detailed activities and dates of those activities are as follows.

### **Monahan Elementary Career Day**

An NTA-HC representative attended Monahan Elementary on November 6, 1998 and participated in the career day activities. The NTA representative spoke to approximately six classes in 30 minute intervals. The students were able to ask questions during the last 10 minutes of each session.

### **LaMarque Middle School Career Day**

On December 8, 1998, six members of the NTA-HC and also NASA Johnson Space Center employees participated in the Career Day at LaMarque Middle School. Each member provided 25-35 minute classroom presentations to 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup>-graders. The presentations addressed their current work assignments, how they selected their careers, education and training, hobbies and other interests, and opportunities in their fields.

### **Coalition Fashion Show**

An NTA representative participated in the Coalition of African American Organizations Fashion Show. The show was held January 23, 1999 at Brady's Landing, and funds raised were to assist in the funding of the Empowerment Through Education Day.

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#### **Evan E. Worthing Senior High School Science Fair**

Several NTA-HC representatives participated in the Science Fair at Worthing High School on February 2, 1999. The members served as judges for the 200 students with science projects. The judges listened to brief presentations of each project, and then graded them accordingly.

#### **Sutton Elementary for National Engineers Week**

NTA representatives visited Sutton Elementary School on February 26, 1999 as part of a volunteer effort with NASA for National Engineers Week. The presenters who are also NASA employees showed a film outlining the building of the International Space Station and spoke to two 4<sup>th</sup> grade classes about being an engineer and working for NASA.

#### **Empowerment Through Education Day**

The ETED is a one-day event that affords Houston and surrounding area high school students an opportunity to participate in career and academic workshops which assist them in making decisions toward a brighter future. Four NTA-HC representatives participated in this workshop and worked with over 100 students from Houston Independent School District (HISD), Fort Bend, and Baytown. This event was held February 27, 1999 at the University of Houston (Central Campus).

#### **LaMarque High School Career Awareness Day**

On March 5, 1999 five NTA-HC representatives and JSC employees participated in Career Awareness Day at LaMarque High School. Each member was assigned a classroom where the students could visit the presenter of their choice. The presenters addressed their required job skills, education, salary range, and opportunities available in their businesses.

#### **GCTAME Annual Regional Mathematics and Science Competition**

The mathematics and science competition sponsored by the Gulf Coast Texas Alliance for Minorities in Engineering was held on March 6, 1999 at Milby High School. An NTA representative served as a volunteer to assist students to their test locations and as a proctor to monitor test times.

#### **Monica Lamb (Houston Comets) Space and Basketball**

The first annual Space and Basketball Camp was held March 15-19, 1999 at Texas Southern University. This week-long event taught K-3 and 4-6 graders the fundamentals of basketball and the true meaning of space. Some of the space-related activities included building and launching an Estes rocket, donning a space suit, touring Johnson Space Center, and talking with some of the astronauts. Kim Perrot also visited the camp to give a motivational speech. Several NTA members and NASA employees attended the camp and meetings to coordinate activities.

#### **Project Apple**

The Project Apple Program is a partnership of HISD and industry, where the industry volunteers substitute teach in elementary schools while the HISD teachers attend multisensory training at the Neuhaus Education Center. This partnership saved HISD over \$21,000. Four NTA representatives/NASA employees each substituted for a week at various elementary schools in the Houston area. The sessions began in January and ended in March.

#### **NTA-Houston Chapter Annual Science Fair**

The NTA-HC conducted its annual science fair April 17, 1999, where over 250 students in grades K-12 competed for top honors at the Sheraton Astrodome Hotel. This event marked the end of science competition in the Houston area, and the area's best students were judged. Three high school students received computers; one high school student and one middle school student were awarded all-expense-paid trips to Space Camp in Huntsville, AL. The college and senior-level high school students also attended the Guaranteed 4.0 Learning System Seminar. This NASA-sponsored event was a great success.

#### **Johnson Middle School**

Two NTA members visited Johnson Middle School on May 12, 1999 to speak with approximately 180 7<sup>th</sup> and 8<sup>th</sup> grade students about their careers at NASA, and the building of the International Space Station. The students enjoyed the presentation and asked numerous questions about NASA and engineering.

#### **Member News**

NTA Houston Chapter member Delphine James recently became a licensed Patent Attorney. She is currently a Contract Attorney with a small Intellectual Property Firm located in downtown Houston. In February, she will be opening an office at 2656 South Loop West, Suite 170, Houston, TX. 77054; telephone number is 713-655-7759.

Because of her prior background in the computer industry, she plans to specialize in computer law and software patent prosecution. Before attending law school, she was a Lead Technical Consultant for BSG, Inc. and had approximately thirteen years of software engineering experience. During her career, she worked on several important development projects that helped advanced technology: (1) early in her career, 1-800 call processing software simulator for AT&T; then (2) the development of one of the first credit card authorization interface systems in Nashville, TN; later, (3) managed the integration of NASA's Mission Control network system software. Her education also includes: B.A. in computer science from Grambling State University in 1980; M.S. in computer science from Illinois Institute of Technology in 1982; and J.D. South Texas College of Law in 1998.

## NTA Space Coast, Florida Chapter 1999 Report



**NTA Space Coast Chapter Chairman and CEO  
Eric C. Green**

### President's Message

Eric C. Green

*"Making Dreams Become Reality"*

The Space Coast, Florida Chapter of the NTA took on the challenge, 14 years ago, to ensure science and technology serve the needs of the at-risk communities within Brevard County, Florida. To date the challenge is reflected in many forms of success. Technology Expositions; the Space Coast Rocket Force Club; students entering college to pursue technical careers; technical conferences; scholarships for Space Camp; student science projects; technical services to the schools and other organizations; workshops on electronics, computers and robotics; and the Project STAR Learning Centers which makes technology more accessible to communities with the greatest need to aid in the improvement of the quality of life.

Preparing the next generation of Black Engineers and Scientists is the mission of the NTA. Black students through the challenge of technology must make new paths, assuring our continued contribution to the nations' history. Future predictions dictate that if our Black youth are to compete in tomorrow's workplace they must be at least computer literate. NTA, a community of Black skilled professionals in concert with other community agencies, and organizations are committed to take on the challenge of the 21st Century to ensure these youth are prepared.

### Introduction

The National Technical Association was established in 1926 in Chicago, Illinois, to address the concern for the lack of minority participation in the mainstream of architectural and engineering activities in America. Today this goal has not changed, but has expanded to assure that science and technol-

ogy serve the needs of the minority community. This effort also addresses the major concern for the participation of minority youth in meeting the challenge of modern technology. The Space Coast, Florida Chapter of the NTA was chartered May 1982, to extend the mission of the organization to Brevard County, Florida.

The NTA introduced many programs to the Brevard County area which includes: the award winning Space Coast Rocket Force Club that exposes economically disadvantaged youth to the excitement of building and flying model rockets; scholarship awards made available for students to attend Space Camp (in Titusville, FL and Huntsville, AL) to learn the basic fundamentals required by engineers, astronauts and technicians for managing a space transportation system; tutorial services provided to assist students having difficulty with their school subjects to develop better study habit skills; assisting students with school science projects; workshops on electronics, robotics and mechanics; joint technical projects with the schools and organizations; and computer classes provided to area residents for the opportunity to learn and use computers to improve their personal and professional lives.

However, the Space Coast, Florida Chapter of the National Technical Association is best known for its Science and Technical Applications and Resources (Project STAR) Program. It is a network of community-based socio-technical learning centers created to serve as a median to unite people with technology and other resources, and to resolve local community problems for an improved quality of life for all its residents. Convinced that technology can be used to help resolve social problems, the NTA introduced Project STAR as a tool to initiate change for improvement. This program enables responsible organizations and individuals to network and form alliances and partnerships with other institutions, to achieve a united county-wide goal of sharing limited resources, and to make positive and measurable impacts on targeted communities of low socio-economic background.

### Executive Board of Directors

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### **Project STAR**

It has been expressed by many local Brevard County, Florida residents that decades of traditional government, schools, private businesses and other institutions have failed to adequately serve some communities, particularly those less fortunate residents who have accepted substandard living conditions and daily struggles as a normal way of life. According to the U.S. Census Bureau, poverty is at its highest since 1964. Ill served by a changing society, many people have been left to their own devices for survival, with low expectation for a better future.

Unfortunately, these consequences have clouded our youth's understanding of the importance to seek an education, compounded by inequitable economic opportunities which seems to prohibit even those with exceptional talents to dare to dream. Yet this is happening here on the Space Coast, considered to be the gateway to the stars. Prosperity through technology for some, but a maze of hopelessness for others. The Space Coast area economy has been repeatedly stimulated with large-scale high-tech projects whose spin-offs have had little revitalization, or sustained benefits to communities with the greatest needs. Whether this is a mere oversight, poor planning, lack of sensitivity or willful neglect by official agencies and institutions, it goes uncorrected as certain communities continue to be excluded from the progressive technological development that can bring hope to many residents long denied.

The need grows with urgency to secure immediate funding, coordinate human expertise, and access other critical resources to develop alternative solutions to problems expanding beyond the boundaries of troubled communities. However, on the long term, more economic and educational opportunities must be extended to targeted communities through reformed government, schools, private businesses and other institutions. Such reformation and innovation must empower communities of great need to become self-sufficient to resolve their own local problems, and improve the chances for disadvantaged youth to get early job experience, and a high school education with emphasis on mathematics, science and computers in preparation for an expanding technical workplace for the future.

The failure to better serve all communities is an alarming reality that exists throughout America, particularly in education which was reflected in a landmark 1983 study, *A Nation at Risk*. This study called for the reform of American mathematics and science education, citing major lags in American students achievement compared to other nations. To promote interest in the study of mathematics and science, America must begin to reach children at a younger age. *A Nation at Risk* and the many educational reports that followed also warned that without a growth in student interest and ability in science and technology, America's world mar-

ketplace competitiveness in these fields would be in jeopardy.

Findings from a report, "Improving Mathematics, Science, and Computer Education in Florida," published by the Florida Department of Education, indicated that "Florida's economic future -- and hence the prosperity of all its citizens -- increasingly will depend on a workplace that is literate in mathematics, science, and computer technology. Unfortunately, there are disturbing gaps between what future Florida workers should know and what today's Florida students are learning."

Broad changes must be initiated within the heart of these troubled communities to effect an improved environment for early intervention and prevention to enhance student learning and community development. Project STAR offers the potential for that change.

### **Project STAR Purpose & Objectives**

The NTA, in its efforts to encourage at-risk students to take on the challenge of mathematics and science, encountered many students performing below the academic average. Although the establishment of tutorial programs enabled some to improve, others were preoccupied with deep social-based problems which transcends the charter of the NTA. However, the NTA recognized that many community-based organizations and other agencies have the knowledge and skills to address, and resolve these social-based problems when properly supported and networked into the targeted communities. Thus, the Project STAR was born.

Project STAR, based upon the founding purpose of the NTA, to assure that science and technology serve the needs of targeted communities, is a socio-technical program developed to unite people with technology to resolve community-based social problems. The NTA solicits those organizations that address critical social-based issues and encourages them to use the Project STAR learning centers. Through this program, the NTA makes scarce resources (facility workspace, computers, photocopiers, video equipment, telecommunication, interactive learning aids, books, administrative materials, and other productivity improving technologies) available to organizations that are specifically chartered to address community-based social problems.

Through the Project STAR Program, the NTA promotes social and economic awareness, problem-solving strategies, consistent community leadership, coordination of community resources, quality education, career awareness, parent involvement with their children, and facilitates the communication process between the various organizations and agencies that utilize the services of the Project STAR.

**The objectives of the Project STAR Program are to provide a medium to:**

- (1) Increase and maintain public awareness and understanding of science and technology, and its benefits and impacts to our daily lives.
- (2) Make available special academic and non-academic

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- guidance to reduce the risk of student dropout.
- (3) Increase the participation of at-risk students in the higher phase mathematics, science and vocational courses offered in public schools, or other technical and social enrichment activities provided through alternative learning programs.
  - (4) Encourage private businesses and government to employ at-risk students for early job experience to bring an awareness of career opportunities, and the practical understanding of why pursuing an education is an important means for achieving a career with good pay.
  - (5) Promote a volunteer community services corps for youth and adult participation, to encourage development of social interaction skills for improved community-wide relationships.
  - (6) Enable non-technical community-based organizations to enhance and expand their services within the community to address the basic needs (social, health, education, welfare, civic awareness, etc.) of its residents for an improved quality of life.

The STAR Program is being implemented as a county-wide community service network comprised of technical learning centers operated by community-based organizations. Each STAR learning center is strategically located within those communities determined to have the most immediate need for improvement. The STAR network has the potential to link limited resources into targeted areas for improved productivity, and development of better working relationships between business, industry, Government, schools and other communities.

#### **FY98-99 Activity Goals Accomplished**

The Space Coast, FL Chapter has served over 900 youth and adults this past fiscal year. Some events do not require registration therefore this count does not include all actual participants. Our special focus is youth, however, Project STAR encourages use of the facility and plans programs of interest to all ages. There has been an increase in adult use and especially in "family" participation.

#### **Activity #1: Academic Tutorial Services**

**Over 80 students participated in Homework/Tutorial Services, which included:**

**Homework/Tutorial:** Volunteer tutors assisted students experiencing difficulties with their academic subjects. Study habit skills and remedial reading help was made available. Counseling was also provided to increase parent awareness and participation in the educational process of their children.

**SAT Math Tutorial:** High school students provided assistance in reviewing and learning strategies and skill builders for SAT success. NTA Financial Officer Welmon Speed tutored these sessions to "prepare students today for success tomorrow".

**Skills Reinforcement on Computer:** Appropriate software is available in a wide variety of subjects. Adults and students

were encouraged to practice their skills in key-boarding, SAT, or the subject of their choice.

#### **Activity #2: Computer and the Internet**

**Over 300 people participated in Computer related activities including:**

**Skills:** Students were taught basic key-boarding skills, word-processing, database management, and spreadsheet applications on both the Apple and IBM compatible computers. Students were also exposed to the world of the Internet to explore the wonders of computer networks for accessing the information superhighway.

**After-School Lab:** Students used the computers and Internet to complete school assignments, improve basic computer competency, and learned to type or selected a computer program for pleasure or to work on special projects such as letters, cards or banners.

**Senior Mouse Chasers:** Senior Citizens were introduced to the computer and learned to use Print Shop and Microsoft WORD. They published periodic newsletters, worked on programs for their churches and organizations, and assisted the community. Our Mouse Chasers included a 94-year-old youngster. They previewed the net, and e-mailed and received a reply from England. They are anxious to participate in 2000 Internet Training.

**Adult Open Lab:** At the Cocoa West Center, adults used the computers to improve their employability skills, for pleasure, or to assist their churches and organizations during open hours. Special assistance was available from staff as needed.

**Special Workshops:** Introduction to Computers, WORD, and graphics classes are scheduled in small groups. Most classes were held on site.

#### **BCC/NTA Partnership Community Computer Familiarization Class: February 27 - March 20, 1999**

(4 Consecutive Saturdays, 2:00 PM – 5:00 PM)

Teacher: Welmon V. Speed, Jr., NTA Financial Officer

Sessions were held at BCC North Campus in Titusville, Florida. Approximately, eighteen students attended, ranging in ages from the early twenties to one lady who was 82. Students were introduced to basic computer concepts and terminology (desktop, icon, O/S versus application programs) including the hierarchy of hard and soft drive locations and their embedded folders/files (My Computer). They were also introduced to Microsoft Word capabilities and finished the day accessing the Internet. Students were able to try these techniques themselves at their computer.

During the third session the teacher brought in an upgraded 486 computer with the CPU cover removed to show the students the internal components/configuration. The following components were identified: motherboard, hard

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drive, 3½" disk drive, CD ROM drive, power supply, sound and video cards. The remainder of the session was used to do a hands-on workshop with Microsoft Excel and web browsing on the Internet.

During the final session the students were allowed to do a hands-on workshop with Microsoft Power Point. Certificates were given and the students were asked to generate a critique of the course and teacher via a Word document. The response was positive. A few students said that they would probably pursue taking an application software familiarization course through BCC in the near future. Members of BCC's student support services were available at every session and assisted the students with performing the hands-on workshop.

### **Activity #3: Workshops Prevention/Personal Growth/Skill Building**

**Over 500 individuals participated in one or more of the workshops including:**

**Robotics/LEGO:** Students were taught the basics of robotics using "Lego Builder Kits" through interface control to Apple Macintosh and IBM compatible computers. Students learned principles of mechanics, programming, and other disciplines related to robots and automation. NASA engineer and NTA member, Wanda Harding, coordinated the program and trained new volunteers to assist students. The Lego Dacta Control Lab course is an introduction to the world of computers and controls, providing insight to the real world applications including math and science. The course included an overview of the Lego Computer Control Lab, hands-on design and build exercises, programming, and independent projects. The concepts covered within the course included control theory, mechanics, motors, basics in computer programming, and more. Offered to students in the third through tenth grades, many activities designed for the course required the students to work both independently and in groups of two or three. The instructions provided also required the students to use their own creativity.

**Space Coast Model Rocketry:** The Space Coast Rocket Force Club was initiated as a means of generating enthusiasm for science and mathematics by engaging youngsters in fun and exciting uses of technology. Model rocketry is a scientific, educational hobby that provides "hand-on" learning experiences and teaches youth principles of mathematics and physics - culmination in the launch of model rockets.

**Other Activity #3 Workshops included (some workshops are not listed by name):**

**October**-Computer Literacy Month Contest, Print Shop Workshops; **December**-Christmas Card Workshop; **January**-Black History Martin Luther King Town Meeting; **February**-Black History Youth Celebration "Our Friend Martin"/Rap; **March**- Easter Workshop; **April**-Aim for the

STARS; You Can Be What You Want to Be!; **May**-Black Health and Fitness Week (Week of Daily Activities including Aerobics, Community Walk, Tae Bo, Health Speakers), About Loving Yourself Circle Workshop; **June**-Financial Planning for Youth; Black Music Month Talent Show; **July**-Anger Management Round Table, African American bingo Challenge, Say No to Drugs Gospel Music Festival; **August**-Graphics Computer Workshop; **September**-Senior Celebration of Life Program.

### **Activity #4: College and Educational Awareness Programs**

Over 70 people participated in one or more of the programs designed to inform students and parents of educational opportunities and encouraged students to remain in high school and to attend college.

#### **Activity #4 Activities included:**

**December**-College Rap Session (Job Corps, Brevard Community College, WXXU representatives and College Student Speakers); **February**-Financial Aid Workshop, College Recruitment Breakfast (Hosted with Historically Black Alumni College Consortium).

### **Activity #5: Self-Esteem Workshop Programs**

**African-American Mentorship:** This program focused on motivating and guiding at-risk African-American male youth through sharing skills, talents, and experiences to heighten their cultural awareness and nurture them to mature development. The youth were engaged in self-esteem improving activities, rap sessions with African-American male professionals on such as their attitudes, school work, family environment, responsibilities, drugs abuse, youth crime and other sensitive subjects.

**Cocoa West Project STAR United Over 100 Youth:** Students participated in their choice of workshops emphasizing building positive self-concepts, confidence, identifying skills and special talents, improving self-awareness and the ability to relate and work with others.

**Activity #5 Self-Esteem Workshops included:** Project STAR/Cocoa West Girls Club (ongoing weekly meetings); March-Self-Esteem Pizza Party, Women's Social for Mothers and Daughters; June- Xhabbo Dramatic Storytelling, "I Am Somebody" with dejay Jo Jo Dancer, Hands On Introduction to Musical Instruments; July-Xhabbo, If You Can Say It, You Can Sing and Play It!; September-Boy's Basketball Game & Followup Pizza Party/Rap.

### **FY98-99 Partnerships and Sponsors**

*Alco Rest*  
*Alzheimer's Association*  
*Battle Axe*  
*Boeing Company*  
*Brevard County Board of County Commissioners*  
*Community Development Block Grant Program*

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- Christ Aid Ministries*
- Circles of Care*
- Community Networking Coalition*
- Nations Bank*
- North Brevard Literacy*
- Omega Psi Phi Fraternity*
- PAL Program*
- Park Avenue Baptist Church*
- Parks & Recreation*
- United Christian Fellowship Church*
- United Way of Brevard*

## **Pittsburgh Chapter Report**

### **1998-1999 Charles Drew Science Fair**

The 1998-1999 science fair keynote speaker was Willette Johnson, a doctoral candidate in mathematics at the University of Pittsburgh and a resident of Greentree. She was given a standing ovation.

Letters were sent to about 120 youths to announce the 1999 Charles Drew Science Fair, and to recruit their participation. Letters were also sent to principals and science teachers in public, private, and parochial schools.

A total of 115 students were registered for the fair, of whom 38 were 6th grade, 46 were 7th grade, 29 were 8th grade, and 2 were 9th grade. Eleven schools were represented.

The Board of Education recognized the winners of the Charles Drew Science Fair, along with winners of other science fairs, on Friday, May 14, 1999 at the Connelly Trade School.

The Allegheny County Commissioners also recognized those students who were winners and those who received honorable mention. This ceremony was held Thursday, June 10, 1999 at the Allegheny County Courthouse. Invitation letters, accompanied by news releases, were sent to the students, their parents, and their school principals. Rich Matthews of the Pittsburgh Public Schools was also informed.

### **1999-2000 Charles Drew Science Fair**

#### **Workshops**

Ms. Stacie Pharrams, of the Carnegie Mellon University Center for Light Microscope Imaging and Biotechnology Center, is conducting project workshops for students on Saturdays at the Mellon Institute. The workshops are being conducted through February 20, 2000. This is the second year for this segment of the Charles Drew Science Fair.

#### **Orientation**

Orientations for interested students were held in January, 2000. This was to attract additional students to participate in the Charles Drew Science Fair. Our preliminary goal for the year 2000 science fair is to display 100 science projects. The orientation was held at the Carnegie Science Cen-

ter, this year in cooperation with the Allegheny Science Consortium.

#### **Science Fair Day**

The Seventeenth Annual Charles Drew Science Fair will be held Saturday, March 11, 2000 at the Carnegie Mellon University Rangos Auditorium. This year, we will feature science demonstrations, a special display from college students who are pursuing careers in science and technology, and we hope to reach our goal of 100 science fair projects. We will recruit students from area schools that have students in grades 6 through 9. We have expanded the fair from grades 6-9 to grades 6-12, to continue exposing high school students to the world of science and mathematics.

This year, we will have a new partner that will provide additional assistance to the winners of this year's science fair. That partner is the Regional Science and Technology Fair, sponsored by the Carnegie Science Center. We are collaborating with them so that our rules and their rules are the same. This will enable Charles Drew Science Fair students to prepare projects that meet their standards. All of our winners will enter their projects in the Pittsburgh Regional Science and Engineering Fair.

## **Detroit Chapter Report**

### **Chapter Officers and Members**

President	Mrs. Lyla Washington
Vice President	Mr. Kim Parham
Secretary	Dr. Allesia Gillespie
Treasurer	Mr. Wallace Ribbron
Chapter Reporter	Mr. Benjamin Russo
Co-Member Chair	Ms. Cheryl Monroe
Chapter Advisor	Mr. Vincent C. Stuart
Financial Secretary	Mr. Paul Jones
Members	Mr. Ron Baker
	Mr. Martin Stuart
	Mr. John D. Lovejoy
	Mrs. Tracey R. Matlock

### **Chapter Activities**

The Chapter holds regular meetings, and Board meetings every 2 months. It also has membership meeting suppers, and Saturday morning Board breakfasts.

In 1998, the Chapter gave a student a scholarship of \$700 and a paid trip to the NTA Conference in Arlington, VA. Two runners-up received leather certificates and \$100 each.

In 1999, a theater party and fundraiser was held to finance our upcoming awards reception, for students and chapter corner-stones, and one honorable mention. We are working toward a black-tie affair to be held in March.

Student awardees will receive plaques and awards of \$500, \$300, and \$200.

## Washington, DC Chapter Report

### Officers:

*President:* James L. Harris

*Secretary:* Wyllona Harris

*Treasurer:* Arthur Southerland

### Active Members:

Jesse Bemley, Lester Clemons, George Carruthers, Freddie Hill, Richard Thomas, John Trimble

The Washington, DC chapter of NTA is a loosely affiliated group of individuals, engaged in a variety of community service activities, who support the ideals and goals of the National Technical Association and who serve both the local community and the national body. The editorial committee for the journal and newsletter is composed primarily of Washington chapter members. In addition, the president of the chapter agreed to serve as a co-executive director for the organization. We have viewed the local chapter as a place to come to renew commitment to the community and to assist others in their individual endeavors.

Dr. Jesse Bemley has a nationally recognized program which provides training in advanced computer topics for junior high and high school students, and affords them the opportunity to present their work at national and international conferences. The Washington chapter has provided monetary support as well as contacts upon which Dr. Bemley has built relationships with colleges and universities.

Dr. George Carruthers has served as NTA editor for years, and continues to provide counsel and research experiences for high school and college students in the Washington area. He also makes many appearances as a speaker in educational forums. He continues to be involved in and contributes personally to numerous other education and public outreach organizations.

Lester Clemons was instrumental in revamping city regulations for certification of boilers as a member of a volunteer Board of professionals who assist the city in such matters.

Freddie Hill adopted a school and provides assistance twice a week to selected classes in mathematics.

The chapter hosted a mathematics competition April 17, 1999 drawing 70 students from Maryland, Virginia, and the District of Columbia. Cash awards and trophies were presented to winners and certificates to all participants.

One of the more consuming activities this year was the planning and execution of major parts of the National Conference. The chapter membership aided in speaker selection and contacts, session planning, as well as logistics in support of the conference.

While we are only able to provide a summary of some of the varied activities in which our members have been involved, we are proud of the number of persons who have been touched by our outreach. We believe we are making a difference at a local level and remain committed to our com-

munity and its development.

The Washington Chapter meets the last Tuesday of each month on the campus of Howard University. The annual mathematics competition occurs in the month of April.

### NTA 1999 National Conference: Student Technical Paper Presentation Awards

#### Graduate Student Session:

**First Place (\$300 Award)-** “The Use of the World Wide Web for the Collection and Presentation of Data” by Rachel Bonas (Dept. of Systems and Computer Science, Howard University)

**Second Place (\$200 Award) -** “Orbital Position and Attitude Calculations for the Advanced Research and Global Observation Satellite (ARGOS) for Use in the Pointing Determination of the Global Imaging Monitor of the Ionosphere (GIMI)” by Garland L. Dixon, Jr. (Dept. of Aerospace Engineering, University of Maryland, and Space Science Division, Naval Research Laboratory)

#### Undergraduate Student Sessions:

**First Place (\$300 Award) -** “Analyzing Meteorites using Mossbauer Spectroscopy” by William McCallister (Department of Physics, Morgan State University) and Eugene Hoffman

**Second Place (\$200 Award) -** “Optimizing Seed Germination for Spaceflight” by Nadine Noorhasan (University of the Virgin Islands)

**Third Place (\$100 Award) -** “Suppression of Tumorigenicity in a Transformed Liver Cell Line: Isolation and Characterization of Differentiated Cells Directly from the Liver” by Burthia Booker, Sharon C. Presnell, and Gary J. Smith (Dept. of Pathology and Laboratory Medicine, University of North Carolina School of Medicine)

**First Honorable Mention -** “Development of NASA *Sky-Watch*” by Derrick Douglas (Dept. of Computer Science, Texas Southern University)

**Second Honorable Mention -** “Commanding, Data Acquisition, and Data Reduction for the Global Imaging Monitor of the Ionosphere (GIMI) on the Advanced Research and Global Observation Satellite (ARGOS)”, by Melody A. Finch (Dept. of Computer Science and Information Systems, University of Maryland, and Space Science Division, Naval Research Laboratory)

**Third Honorable Mention (Tie) -** “Study of Mechanically Alloyed FeMnO<sub>3</sub>”, by Brian Holloway (Dept. of Physics, Morgan State University) and Dereje Seifu

**Third Honorable Mention (Tie) -** “Measurement of Bubble Growth and Detachment during Pool Boiling in Reduced Gravity”, by Tequila A. L. Harris (Dept. of Physics, Lane College)

#### High School /Middle School Student Sessions:

**First Place (\$100 Award) -** “Hopfield Networks” by Jessye Bemley (St. Francis Xavier School, Washington, DC)

**Second Place (\$50 Award)** – “Artificial Life, Its Lenient Uses, and What’s in Store for the Future”, by Edgar Burness Nunley (Thurgood Marshall Middle School, Temple Hills, MD)

**Third Place (\$25 Award) (Tie)** – “Audio Communication by Speech Synthesis”, by Oumar Thiam (Woodrow Wilson SHS, Washington DC)

**Third Place (\$25 Award) (Tie)** – “Robotics”, by Ronnie Young Gilmer (Lord Baltimore Middle School, Ft. Washington, MD)



**NTA National Secretary Yolanda Hinton presents 1999 Conference First Place High School student presentation award to Jessye Bemley. At head table are co-Executive Directors Gilbert Haynes and James Harris, and also Wyllona Harris.**

**NTA Goddard Chapter Member Honored at US Black Engineer of the Year Conference**

Ms. Jacqueline L. Mims, Aerospace Engineer at NASA Goddard Space flight Center, Project Manager for the WIRE Engineering Test Satellite, and NTA Goddard Chapter member, was selected as the winner of the *Most Promising Engineer in Government* award by the 2000 Black Engineer of the Year Awards Selection Committee. She was recognized at the Fourteenth Annual Black Engineer of the Year Awards Conference, February 17 - 19, 2000. The Awards Ceremony was held on Saturday, February 19, 2000 from 7:30 am - 9:00 am, at the Renaissance Harborplace Hotel.

**NTA Charles E. Price Scholarship Awarded to Alexandria Carroll**

The 1999 Charles E. Price Scholarship was awarded to **Alexandria Carroll**, valedictorian of her 1999 graduating class at Benjamin Banneker High School in Washington, DC, at the awards banquet of the NTA 1999 Conference. The scholarship award was \$6000. The selection was based on her academic record, her biographical essay, and letters of recommendation by school faculty and staff members.

Miss Carroll is currently enrolled at Stanford University, in Palo Alto, CA, majoring in Engineering. Congratulations, Alexandria!



**Mr. Frank T. Davis, keynote speaker for the NTA Membership Luncheon on Friday, November 6, 1999 gave a very lively workshop on “Marketing Your Skills”.**



**NTA members Hattie Carwell and Dr. Kathleen Prestwidge discuss means for attracting students to science and technology at the NTA 1999 Conference.**

## NTA Members Participate in National Academy of Sciences African American History Month Program

On February 14, 2000 the National Academy of Sciences held its Fourteenth Annual Program honoring African American History Month. This year, the theme was "The American Space Program: A Unique Opportunity for African Americans". Participants included former astronaut Dr. Bernard Harris, aerospace engineer Dr. Aprille Ericsson-Jackson (NTA Goddard Chapter president), and astrophysicist Dr. George Carruthers (NTA Washington, DC Chapter).

Dr. Harris, who flew on two space shuttle missions and was Payload Commander for flight STS-63 in February, 1995, was Keynote Speaker. He is currently Vice President for Science and Health Services of SPACEHAB, Inc. in Houston, TX. He was introduced by Dr. Ericsson-Jackson.

Portrait honorees were Dr. Keith L. Black, a neurosurgeon; traffic signal (and other public safety devices) inventor Garrett A. Morgan (posthumously, represented by his granddaughter Sandra Morgan), and Dr. George Carruthers.

The Honorable Rodney E. Slater, U.S. Secretary of Transportation, was also present, and presented remarks. He also introduced the Department of Transportation's new Garrett A. Morgan Technology and Transportation Futures education program.

Students from several Washington, DC-area middle schools and high schools were also present, and the students also participated in the program via a question-and-answer session, led by Dr. Ericsson-Jackson.



**Dr. Bernard Harris, keynote speaker at the National Academy of Sciences African American History Month program, is introduced by Dr. Aprille Ericsson-Jackson.**

## NTA 2000 Conference: Preliminary Announcement

The 72nd Annual Conference of the National Technical Association will be held **October 19-22, 2000**, in the **Hampton, VA** area (exact location to be announced).

The theme of the conference is:

***Black Technologists in the New Millennium.***

We invite the participation by professionals and students in science, mathematics, engineering, and technology in the paper presentations, workshops, and other planned activities.

As in previous years' conferences, we request abstracts (150-300 words) of proposed (15-minute) paper presentations, and of proposed workshops or panel discussions.

Each abstract submission must be accompanied by **full contact information** for the presenter or discussion leader, including full postal mailing address, telephone and FAX number, and e-mail address.

**Electronic submission of abstracts is preferred**, as this greatly facilitates production of the pre-conference *Compendium of Abstracts*.

**Abstract Submission Deadline:  
29 July 2000**

Please submit abstracts to EACH of the following:

Dr. John Trimble  
Department of Systems and Computer Science  
Howard University  
Washington, DC 20059

E-mail: [trimble@scs.howard.edu](mailto:trimble@scs.howard.edu)  
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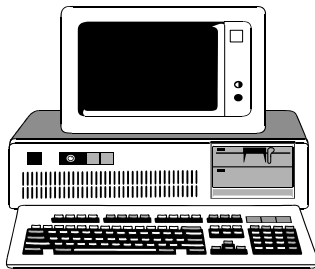
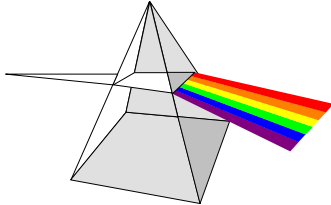
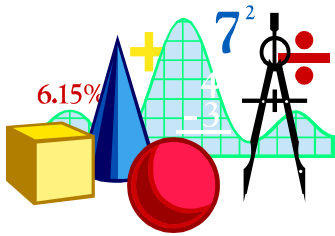
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**Visit the NTA Web Site!**

**NTAONLINE**

<http://www.ntaonline.org>



## PLEASE SEND US YOUR NEWS!

We are hoping to enhance the frequency and timeliness of the National Technical Association (NTA) Newsletter. Please send news items you feel would be of interest to professionals, students, and educators involved in science/technology fields and/or of interest to the NTA Membership (ELECTRONIC SUBMISSION PREFERRED).

Please include with your submission your name, telephone number, e-mail and snail mail address. Please also send an information copy of whatever you send us to your Chapter President and/or Regional Director.

In our attempt to be faster and cheaper, and eventually better, we format the Newsletter in Microsoft Publisher 98. Therefore, submissions in MS Word 95/97 or Powerpoint 95/97 are preferred (although Word Perfect and .TXT submissions can be converted). Any photographs should be black and white or color in .JPG or .BMP format.

**Please submit to EACH of the following:**

Dr. George Carruthers  
 george.carruthers@nrl.navy.mil  
 (202) 767-2764

Dr. Jesse Bemley  
 jbemley@american.edu  
 (703) 681-9142

Dr. John Trimble  
 trimble@scs.howard.edu  
 (202) 806-4822

**In This Issue...**

**NTA 1999 CONFERENCE—NTA CHAPTER REPORTS**

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