HORIZONS

article to be submitted to the Editor | December 2015 dinner meeting | AIAA Houston Section

Guests of Honor

Dr. Tulu Besha Bedada and Dr. Berhan Gessesse of the Ethiopian Space Science Society

Their Imperial Highnesses Prince Ermias Sahle-Selassie, grandson of Emperor Haile Selassie, and Princess Saba of Ethiopia

Special Guests

Former astronaut Dr. Bonnie J. Dunbar and former NBA basketball player Reggie Slater

Special thanks for event photography: Cinematographer Bemelekot "Mel" Tewahade

Additional photographs: George Abbey, Jr.

Horizons

Newsletter of AIAA Houston Section

AIAA:

The American Institute of Aeronautics and Astronautics

Ethiopian Delegation Visits AIAA Houston Section

[Dinner meeting of December 3, 2015. Reporter: Douglas Yazell, Councilor, AIAA Houston Section.]

We attracted a crowd of 214 (EventBrite data) to our dinner meeting event in the astronaut gallery of Space Center Houston (SCH), the official visitor center of NASA Johnson Space Center (JSC). This is a big success in many ways. I see from a November 2014 African Union news article at this hyperlink that NASA Administrator Charles Bolden visited Ethiopia.

AIAA Houston Section Honors and Awards Chair Angela Beck brought this event to our Section.





Above: Dr. Tulu Besha Bedada (left) and Dr. Berhan Gessesse of the Ethiopian Space Science Society (ESSS) in the Space Center Houston Astronaut Gallery.





Above: Prince Ermias Sahle-Selassie (left) and Princess Saba of Ethiopia. Image credits: Mel Tewahade (left and above) and George Abbey, Jr.

Level 9 Tour for a Few of Us

For about 11 guests and volunteers, this day started early with a Level 9 visit of Space Center Houston (SCH), meaning that a our visit included our own guide and a small shuttle bus instead of the larger tram used by most visitors going from SCH to NASA/JSC.

It is memorable to see that the NASA/JSC Mission Control Center (MCC) is now named for Christopher Columbus Kraft, Jr. His Apollo program work was as impressive as the work of Christopher Columbus, and similar in nature. Just the day before, Mr.

Kraft participated in a public panel discussion to celebrate the 50th anniversary of NASA missions Gemini 7 and 6, thanks in part to the NASA Alumni League JSC Chapter. A video recording of that event will probably be made public by NASA in the near future, as of December 29, 2015.

The Level 9 tour also allowed us to walk in the original MCC, not just view it through some large windows. That was only the second time I was in there since my 1992 move with Honeywell from California to the NASA/JSC community.







Right: Angela Beck with the tour group in the Neutral Buoyancy Laboratory. Image credits: Douglas Yazell (iPhone 5).



The Dinner Event Begins

Our dinner meeting event started with the social time set aside starting at 5:30 PM. Dinner service started at 6:00 PM, and the arrival of our guests of honor at about 6:15 PM was a memorable occasion. Our attendees came to their feet as the royal family members arrived.

From our publicity, attendees knew the theme for the evening with the Ethiopian Space Science Society. "Ethiopian Space Program Activities: Past-Present-Future; Using Space Technology for the Betterment of Mankind: Enhancing earth observation technology for water resource monitoring, supply and sanitation development from African perspective."



Right: Two professional musicians, Jonathan Yudkin (left) and Vern Vernali, provided excellent background music during our social "hour" of 5:30 to 6:00 PM and throughout the evening.

Image credit: Mel Tewahade.



Above: Left to right: Dr. Dr. Tulu Besha Bedada of the Ethiopian Space Science Society (ESSS), Princess Saba and Prince Ermias Sahle-Selassie of Ethiopia, and Dr. Berhan Gessesse of the Ethiopian Space Science Society. Image credit: Mel Tewahade.







Above: The arrival of our AIAA Houston Section guests of honor. Image credits: Mel Tewahade.

The Eyes of the Child

Presentations started at 6:45 PM with a special song, *The Eyes of the Child*, and a corresponding slideshow created for this event. Professional recording artists Angela "Angie" Beck and Chris

Walker are amazing vocalists, and a recording of this new award-winning song was played before our first guest speaker took the stage.







The Prince Ermias Sahle-Selassie Water Initiative for Africa





Introduction by Dr. Bonnie J. Dunbar Dr. Dunbar and a College Student Essay Winner are Introduced by Former NBA Player Reggie Slater

TOUSTON HOUSTON

This page: Image credits (unless otherwise noted): Mel Tewahade.



SPACE - SENTER HOUSTON

Above: Image credit: George Abbey, Jr.



Above: Houston resident and former NBA player Reggie Slater.





Remarks by Prince Ermias Sahle-Selassie of Ethiopia



The Prince Ermias Sahle-Selassie Water Initiative for Africa





Above: Angela Beck introduces Prince Ermias Sahle-Selassie of Ethiopia. Image credits: Mel Tewahade.

"Imperial coat of arms of Ethiopia (Haile Selassie)" by Tom Lemmens -Own workBased on descriptions from HubertHerald. This vector image includes elements that have been taken or adapted from this: Coat of Arms of the Republic of Malawi.svg (by Sodacan). This vector image includes elements that have been taken or adapted from this: Coat of Arms of the July Monarchy (1831-48).svg (by Sodacan). This vector image includes elements that have been taken or adapted from this: Saint George and dragon drawing.svg (by LadyofHats). This vector image includes elements that have been taken or adapted from this: Heraldic Emblems of the Kingdom of Aragon with supporters.svg (by Heralder). This vector image includes elements that have been taken or adapted from this: Meuble héraldique livre.svg (by Bluebear2).iThe source code of this SVG is $valid. This\ vector\ image\ was\ created\ with\ Inkscape..\ Licensed\ under\ CC$ BY-SA 3.0 via Commons - https://commons.wikimedia.org/wiki/ <u>File:Imperial_coat_of_arms_of_Ethiopia_(Haile_Selassie).svg#/media/</u> File:Imperial_coat_of_arms_of_Ethiopia_(Haile_Selassie).svg



Presentations by Dr. Tulu Besha Bedada and Dr. Berhan Gessesse









Above: Three images of Dr. Tulu Besha Bedada of the Ethiopian Space Science Society. Image credits: Mel Tewahade.



Above: Two images of Dr. Berhan Gessesse of the Ethiopian Space Science Society. Image credits: Mel Tewahade.



Above: Above and right: Two images of the astronomical observatory in Ethiopia.
Image credits:



Presentations by Dr. Tulu Besha Bedada and Dr. Berhan Gessesse

Dear [...],

Thank you so much for realizing our visit very successful through inviting prestigious scholars from Baker Institute [for Public Policy] and NASA.

It is our honor to meet [honored guests] from Baker Institute [for Public Policy]. Specifically, as you said, it is [...] very important to discuss with [them] and [...] the current and future challenges related to access to clean and safe water in Africa, and the challenges of waterborne and water - related diseases as well as neglected tropical diseases that have affected the world so prevalently.

During our visit we propose our agenda as follows:

1. Public Talk

i. Ethiopian Space Program Activities: Past-Present-Future (-40 Minutes)

This talk will introduce the Ethiopian space program from its very beginning in the late 1950's to-date. The presentation will show up the whole journey of the Ethiopian space activities starting from the late 1950's to recent remarkable advent made by the Ethiopian Space Science Society (ESSS), and our future space strategic program. Our presentation will remind us, about our long term partnership with USA through highlighting Ethiopia's collaboration with Smithsonian Astrophysical Observatory on the first of its kind space geodetic and astronomical earth observation satellite tracking and imaging mission using a network of 12 BEKER NUN Camera deployed all over the world in the early days of space development. One BEKER NUN camera was being installed in Ethiopia in 1966 and was in operation until 1973. Besides, we will present detail activities made in recent years by the Ethiopian Space Science society and Entoto Observatory. The [November 2014] visit of the NASA's administrator Major General Charles F. Bolden to Entoto Observatory/ESSS, and his discussion with the Ethiopian Ministry of Science and Technology will be one of the major focus areas of our public talk.

ii. Enhancing earth observation technology for water resource monitoring, supply and sanitation development from African perspective (~40 Minutes)

For this specific public talk, currently we are developing a project proposal to address and realize the prime objectives and aspirations of the Prince Ermias [Sahle-Selassie ...] Water Initiative [for Africa] program. Upon completion of the proposal, we will forward it to you for comment and mutual understanding to devise the implementation strategy of the project.

The project proposal will be focused on the following main points:

- Water resource status in Ethiopia (both surface water and groundwater);
- Earth observation technology and water resource monitoring nexus;
- · Clean water supply and accessibility;
- Water pollution and quality monitoring;
- Water-borne and water-related diseases; Neglected Tropical Diseases .
- Major challenges for the realization of clean water supply program in rural Ethiopia;
- Opportunities to enhance clean water supply for rural Ethiopia;
- Establishing national/international partnership & cooperation for water initiative program in Ethiopia, etc.
- 2. Panel discussion points (following public talk):
 - New water initiative project for Ethiopia;
 - The way forward for initiating space and Earth observation projects; and
 - How to proceed to establish Research & Development collaboration between Ethiopian Space Science Society/Entoto observatory with AIAA, NASA, Baker Institute, SERVIR-Eastern and Southern Africa.

Please note that we haven't yet established any collaboration with SERVIR-Eastern and Southern Africa. It would be a great opportunity for us if we meet someone from SERVIR-Eastern and Southern Africa. Profound thanks and deepest respect,

Tulu Besha Bedada (PhD)

Assistant Professor of Geodesy Head, Earth Observation Division, Entoto Observatory and Research Center P.O.Box 33679 Addis Ababa, Ethiopia

More event photographs



Above: Professional recording artist Vern Vernali receiving thanks for his performance at this event. Left to right: AIAA Houston Section Chair Alan Sisson and Honors and Awards Chair Angela Beck. Image credit: George Abbey, Jr.



Above: Left to right: Dr. Bonnie J. Dunbar, George Abbey, and Prince Ermias Sahle-Selassie of Ethiopia seated at their dinner table. Event venue: Space Center Houston Astronaut Gallery. This also shows the two professional musicians, Johnathan Yudkin (left and on an earlier page, page 3?) and Vern Vernali, who helped with our event. Image credit: George Abbey, Jr.





Above: Recording artist Chris Walker receiving a lapel pin in appreciation from Prince Ermias Sahle-Selassie of Ethiopia. At left: AIAA Houston Section Chair Alan Sisson. Cinematographer: Mel Tewahade. Back to camera: George Abbey. Honors and Awards Chair: Angela Beck. Onstage behind the podium: Left to right: Dr. Berhan Gessesse and Dr. Tulu Besha Bedada (ESSS). Image credits: George Abbey, Jr.



Above: AIAA Houston Section Chair Alan Sisson, Prince Ermias Sahle-Selassie of Ethiopia, Dr. Berhan Gessesse (ESSS) and Dr. Tulu Besha Bedada (ESSS). Event venue: Space Center Houston Astronaut Gallery. Image credit: George Abbey, Jr.

More event photographs and information

http://history.nasa.gov/ap11-35ann/goodwill/Apollo_11_material.pdf (38 pages).

SUNDAY July 13, 1969



Ethiopia

"Today's successful lunar landing is a momentous occasion for all mankind. This marvelous feat is a proof of the gigantic strides man has made in the field of science and technology. We are fully confident that this great milestone in man's search for the unknown will give the American genius and the valiant American astronauts greater encouragement in their further probe of the solar system. We are hopeful that the results achieved in this regard will only be used for the welfare and well-being of mankind and the great cause of the world peace."



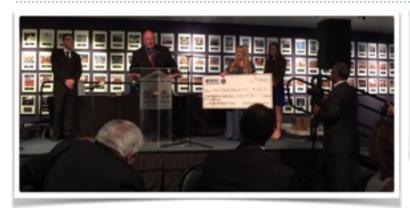
Haile Selassie I Emperor

Left: Angela Beck addressing the audience. Mel Tewahade is in the foreground.



Above: George Abbey and Prince Ermias Sahle-Selassie of Ethiopia. On stage from left to right are AIAA Houston Section Chair Alan Sisson, Angela Beck, and Mel Tewahade. We can see the Space Center Houston logo on the podium, and the astronaut portraits in the Astronaut Gallery. Image credit: George Abbey, Jr.

More event photographs



Above: Dr. Edgar Bering of the University of Houston accepting an AIAA Houston Section donation from the McLane Education Fund to the Mars Rover Competition. Left to right: AIAA Houston Section Chair Alan Sisson, Honors and Awards Chair Angela Beck, Chair Elect Jennifer Wells and cinematographer Mel Tewahade. Backs to camera: George Abbey and Prince Ermias Sahle-Selassie of Ethiopia. Image credit: AIAA.



Above: A closer look at the check from the image at left. Image credit: AIAA.



Above: Recording artist Chris Walker, Prince Ermias Sahle-Selassie of Ethiopia and Walker family members. Image credit: Mel Tewahade.

Note: We would like you to help us find the next newsletter Editor for AIAA Houston Section.



Above: Left to right: Thomas Haregot and Douglas Yazell after dinner in the Space Center Houston Astronaut Gallery. Image credit: George Abbey, Jr.



Above: Prince Ermias Sahle-Selassie receiving a gift of appreciation from AIAA Houston Section. Left to right: AIAA Houston Section Chair Alan Sisson, Honors and Awards Chair Angela Beck and Chair Elect Jennifer Wells. Foreground: George Abbey, Princess Saba of Ethiopia, and cinematographer Mel Tewahade. Venue: Space Center Houston Astronaut Gallery. Image credit: George Abbey, Jr.

Questions and Answers from the Audience before Serving Cake







Right: This version of the Imperial Coat of Arms of Ethiopia (Haile Selassie) is from a Wikipedia <u>article</u>. Vector art by Tom Lemmens (own work).



After dinner but still in Space Center Houston





Above: Garland Bauch, AIAA Houston Section Chair for the 2000-2001 year, with Prince Ermias Sahle-Selassie and Princess Saba of Ethiopia.



Above: Prince Ermias Sahle-Selassie of Ethiopia with college students.



Above: I sat with Thomas Haregot (center), a new acquaintance. His mother was a cousin of Prince Ermias Sahle-Selassie (left), so I introduced him to Princess Saba (right). Image credit: Mel Tewahade.



Above: Prince Ermias Sahle-Selassie of Ethiopia with college students.

After dinner but still in Space Center Houston



Above: Prince Ermias Sahle-Selassie of Ethiopia with his award for the winner of the college student essay.



Above: Left to right: Award-winning professional vocalists Chris Walker, Angela (Angie) Beck, and Jean Albert Renaud (JAR).



Above: Left to right: George Abbey and Prince Ermias Sahle-Selassie of Ethiopia. Image credits: George Abbey, Jr.



Above: Event organizer Angela Beck, George Abbey of Rice University Baker Public Policy Institute and former NASA/ JSC Director, and former astronaut Dr. Bonnie J. Dunbar. Image credit: (?).



Above: Left to right: Prince Ermias Sahle-Selassie of Ethiopia and George Abbey, Jr. of Reaction Systems Limited? Image credit: AIAA.



Above: Left to right: Dr. Berhan Gessesse (Ethiopian Space Science Society, ESSS), Jean-Loup Chrétien, George Abbey, Prince Ermias Sahle-Selassie of Ethiopia, Angela Beck, Princess Saba of Ethiopia, and Dr. Tulu Besha Bedada (ESSS). Image credit:



Above: L to R: Dr. Tulu Besha Bedada (ESSS), NASA Administrator Charles Bolden and Prince Ermias Sahle-Selassie of Ethiopia. Image credit: Mel Tewahade?



Above: Left to right: Dr. Berhan Gessesse (ESSS), artist and former astronaut Alan Bean, Dr. Tulu Besha Bedada (ESSS), AIAA Houston Section Honors and Awards Chair Angela Beck. Image credit: (Mel Tewahade?)



Above: Left to right: Artist and former astronaut Alan Bean, Dr.
Berhan Gessesse and Dr. Tulu Besha Bedada (ESSS). In the background is Princess Saba of Ethiopia. Image credits: Mel Tewahade?







Above: Left to right: Dr. Tulu Besha Bedada (ESSS), NASA Administrator Charles Bolden and Prince Ermias Sahle-Selassie of Ethiopia. Image credits: Mel Tewahade?



Above: Left to right: Event organizer Angela Beck, former French astronaut Jean-Loup Chrétien(?), Dr. Tulu Besha Bedada (ESSS), Prince Ermias Sahle-Selassie and Princess Saha of Ethiopia, NASA Administrator Charles Bolden and from the Rice University Baker Public Policy Institute, George Abbey, former NASA/JSC Center Director. Image credit: (?).



Above: Left to right: Dr. Tulu Besha Bedada and Dr. Berhan Gessesse (ESSS), Prince Ermias Sahle-Selassie and Princess Saha of Ethiopia, NASA Administrator Charles Bolden. Back to camera: From the Rice University Baker Public Policy Institute, George Abbey, former NASA/JSC Center Director. Image credit: (?).



Above: Left to right: Dr. Tulu Besha Bedada (ESSS), Prince Ermias Sahle-Selassie and Princess Saha of Ethiopia, NASA Administrator Charles Bolden, and George Abbey of Rice University Institute for Public Policy and former NASA/JSC Center Director. Image credit: Mel Tewahade?





Above: Left to right: Dr. Tulu Besha Bedada (ESSS), Prince Ermias Sahle-Selassie and Princess Saba of Ethiopia and NASA Administrator Charles Bolden. Image credit: Mel Tewahade?



Above: Former French
astronaut Jean-Loup
Chrétien and AIAA
Houston Section Honors and
Awards Chair Angela Beck.
Image credit: Mel Tewahade?



Above: Left to right: Dr. Berhan Gessesse (ESSS), former French astronaut Jean-Loup Chrétien, George Abbey (Rice University Baker Institute for Public Policy and former NASA/JSC Center Director, Prince Ermias Sahle-Selassie of Ethiopia, event organizer Angela Beck, Princess Saba of Ethiopia, Dr. Tulu Besha Bedada (ESSS) and George Abbey, Jr., of Reaction Systems, Inc. Image credit: Mel Tewahade?





Above: Former astronaut Buzz Aldrin with Prince Ermias Sahle-Selassie and Princess Saba of Ethiopia. I found that shirt on the website of Buzz Aldrin's ShareSpace Foundation. Image credit:







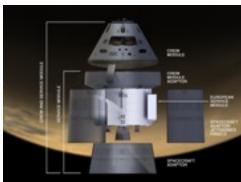
Above: Houston Mayor Annise Parker with (left to right) Angela Beck, Treavor Quinn, and Princess Saba of Ethiopia. In the foreground with their backs to us are (left to right) Dr. Berhan Gessesse and Dr. Tulu Besha Bedada. The event was the Christmas tree lighting of December 4, 2015.





Left: <u>Infographic</u>, Journey Around the Moon Powered by Airbus DS. The first mission of Orion will be NASA Exploration Mission 1 (EM-1), including the Orion European Service Module (ESM).

https://airbusdefenceandspace.com/wp-content/uploads/2015/11/orion_infographic.pdf



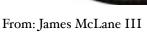
Above: Images showing the ESA service module to be used for the EM-1 mission. The newer solar panel shape is rectangular, not circular. The top image shows the newer silver color for the capsule. Image credits: NASA and ESA (European Space Agency).



Above: From the Space Center Houston Level 9 tour of December 3, 2015, Prince Ermias Sahle-Selassie of Ethiopia at NASA Johnson Space Center. Image credit: Mel Tewahade.

Coin Collector James C. McLane III (1945-2015)



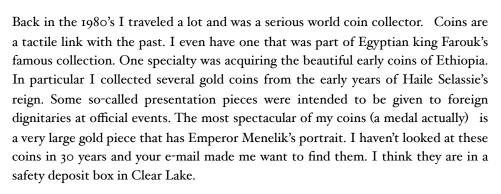


Date: Tuesday, May 19, 2015 at 7:27 PM

Subject: Ethiopian stuff To: Angela Beck

Angie,

You always surprise me!



Lately my downtown church has been hosting a Christian congregation from Ethiopia. It's Oromo (an repressed Ethiopian ethnic group). In another coincidence, I have a couple of old Rhinoceros or Elephant hide shields that are Oromo dating back to when the Ethiopians fought the Italians in 80+ years ago. It was said that these heavy shields would deflect a bullet if fired from a distance.

We will edit this page with privacy concerns, etc., in mind. From: Angie Beck

Subject: Re: Ethiopian stuff

Date: November 18, 2015 at 7:32:46 PM MST

To: Douglas Yazell

He was very excited about this upcoming event and I was asking him to be on the Crown Council as a long term advisor to Prince Ermias..



Above: James C. McLane
III images from a 2015 issue
of Horizons, newsletter of
AIAA Houston Section.
Medallion images are from
McLane's email note. Here is
a link to a website with a
similar image.



A Gift of Postmarked Stamps

Christian Ragon is a great family friend of mine. He attended our AIAA Houston Section November 2015 dinner meeting, but could not attend this one. He worked for a few years in Ethiopia, so he was tempted to attend,

but he had a schedule conflict. After our December dinner meeting, he sent us these images of a postmarked stamp and 3 first day covers he would like to send to the Prince as a gift. We will ensure the gift is delivered.

Coincidentally, the door prize he won at our November dinner meeting was a first day cover! It was an Apollo 11 first day cover with an Apollo 8 stamp.





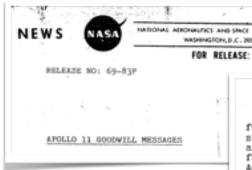


Above: Mr. Christian Ragon receives his Apollo 11 (with Apollo 8 stamp) first day cover door prize from Douglas Yazell and Jennifer Wells at our November dinner meeting. Image credit: Jesi Hoolihan.



http://history.nasa.gov/ap11-35ann/goodwill/Apollo_11_material.pdf (38 pages).

SUNDAY July 13, 1969 Image sources: Pinterest (via internet search).. Emperor Haile Selassie of Ethiopia with John and Jackie Kennedy.



Ethiopia

"Today's successful lunar landing is a momentous occasion for all mankind. This marvelous feat is a proof of the gigantic strides man has made in the field of science and technology. We are fully confident that this great milestone in man's search for the unknown will give the American genius and the valiant American astronauts greater encouragement in their further probe of the solar system. We are hopeful that the results achieved in this regard will only be used for the welfare and well-being of mankind and the great cause of the world peace."

Haile Selassie I Emperor

. . .







