



the Blastoff



Newsletter of the Rotary Club of Space Center
 P. O. Box 58862, Houston, Texas 77058
 Meetings Monday Noon at Bay Oaks Country Club
 14545 Bay Oaks Blvd., Clear Lake City
 Phone: 281.488.7888 * Chartered 1964
Volume 46 : Number 33 * April 7, 2008

Programs:

Today..... Rick Noriega
 Apr 14. **Toros**
 Apr 21. **TBD**
 Apr 28. **GSE Team France**
 May 05. **Excellence in Education Awards**
 May 12. **High School Aerospace Scholars**
 May 19. **Rotary Youth Exchange**
 May 26. **Memorial Day, No Meeting**
 June 02. **PE, Gary Johnson -- Shrimporee 2008**
 June 09. **Public Service Recognition Awards — EMTs**
 June 16. . **Jay Wall / Crime in Houston and what to do about it.**
 June 23. **Year end directors' reports**
 June 30. **Pres. Dick– Remarks & Awards**

Say Happy Birthday to —

Dick Gregg III. April 4th
 Ken Gurry. April 15th
 Dennis Dillon. April 22nd
 Dick Meyer. April 30th

Events Calendar

- Club Board of Directors 3rd Tues @ 7 a.m.
- Endowment Foundation Board of Trustees
 2nd Tues @ 7 a.m.
- Rotary Foundation Comm. . . last Wed @ 7 a.m.
- RNASAF Space Awards Dinner. April 25
- Rotary 5890 District Conference in Galveston
 April 24-26
- Springoree. May 8
- Texas Roadhouse Golf Tournament
 Monday, June 30 @ Bay Oaks CC
- RI Convention, Los Angeles. . . June 15-18 '08

SCRC Fellowships 6:30 p.m.

Apr 08. **Topwater Grill** 815 Ave O, San Leon
 May 06. **Chelsea Café** 4106 NASA Pkwy
 June 3. **Bay Oaks Country Club** Pool Party,
 Bring Grandchildren

Reservations required. Email Roger Donnelly
Ridonnely@aol.com



SPACE CENTER ROTARY



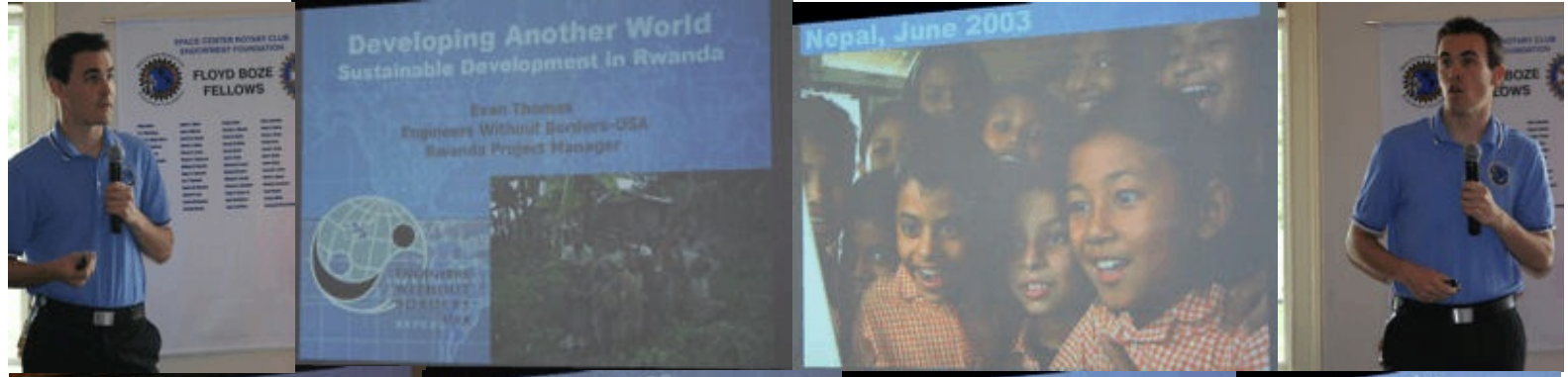
When: Thursday May 8th

Where: Under The Oaks – League City

What: VIP Event – Silent & Live Auctions

- Dinner
- Live Music by Ja'ndo
- Connoisseur Club – Select wine tasting from the wine cellar of
 • Mike & Rosie Hesse
- Tickets: Event: \$100.00 per person
 • Connoisseur Club \$100 Extra
- Next Planning Meeting: Wed. 3/19 @ 5:45 PM
 • At Baileys in Seabrook

Our speaker on March 31st was Evan Thomas of Engineers Without Borders, JSC Chapter. He presented a very interesting and emotion provoking slide presentation. Projects include solar powered computers in Nepal & water projects in Rwanda. Rwanda is about the size of Maryland and has 8,000,000 inhabitants. Here are the pictures. They will speak for themselves. SCRC is very involved in these projects with monetary assistance. How can you help?



Rwanda, 1994: Genocide

- The Rwandan genocide of 1994 took place over one hundred days (from April through July)
- Between 500,000 and 1,000,000 people were murdered, with several million others suffering from other afflictions (e.g., rape, torture, displacement)
- This date marks the end of the Holocaust and is marked by the "Never Again" motto since the phrase "Holocaust and Genocide"
- As a direct result, many have died of AIDS
- Muramba and Mugonero were directly affected by the genocide

Genocide Outcomes

- Infrastructure Destroyed**
 - Water, Roads, Food, Electricity, Sanitation
 - Government lacks resources to help
- Families Destroyed**
 - Orphans, Child-led Homes, Single Parents
 - Nearly 4,000 orphans in Muramba
- Unity Destroyed**
 - Distrust, Survival mentality

Partner Communities

- Muramba, Gisenyi
- Girls' Boarding Secondary School
- Vocational School
- Muramba Clinic
- Mugonero, Kibuye
- Mugonero Hospital
- L'Esperance Children's Aid Orphanage

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EWB-USA Model

- Community involvement is critical to ensure appropriate projects, sustainability and ownership
- Community partnership, adopting a village approach developed with learning and development environment, now the UN model for international development
- Other development work has led to charity culture, fighting against this trend has been the most challenging aspect of EWB work

Site Assessments

- Muramba - March 2004
- Mugonero - May 2005
- Examined health challenges**
 - Waterborne disease is often the leading cause of death and illness
 - During dry seasons there is not enough water for all residents
 - Respiratory disease caused by indoor complexes is second leading illness
 - Unknown number of people have AIDS
 - Muramba is 15 km to nearest hospital, 70 deliveries a month in one room

Community Meetings

- Interviewed local subsistence farmers about health, lifestyle, economic, education
- Must do not feel as though they have enough food to eat each day
- Have less than ten dollars each per year
- Visit clinics / hospitals only when healthy ill
- Live day-by-day, with much consideration for the future
- Effective workforce in many regions
- Poverty that led to the genocide has not changed**

Meeting with President Kagame

Project Goals

- Develop a healthy community**
- Physical Health**
 - Water quality and quantity
 - Clinic improvements
- Economic Health**
 - Microenterprises
- Educational Health**
 - Lighting, resources for schools
 - Partnership with vocational schools

Biogas Generators

- Family Biogas Reactors**
 - Installed in Muramba and Mugonero in 2004
 - Developed with KIST
 - Removes contamination from surface water
 - Promotes better hygiene
 - Reduces use of firewood
 - Produces gas that can be used for heating, cooking, cleaning, and running a generator for electricity
 - Carbon dioxide is a cleaner greenhouse gas than methane

Improved Cookstoves

- Improved Cookstoves**
 - Fully combust biomass
 - Result in a 60% reduction in wood usage
 - Elimination of black smoke

Solar Lighting, January 2006

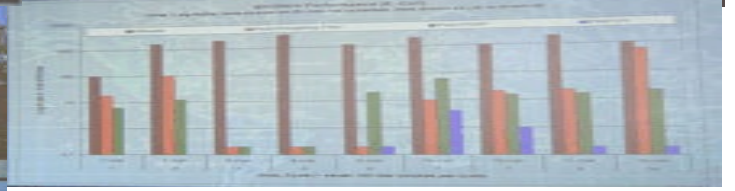
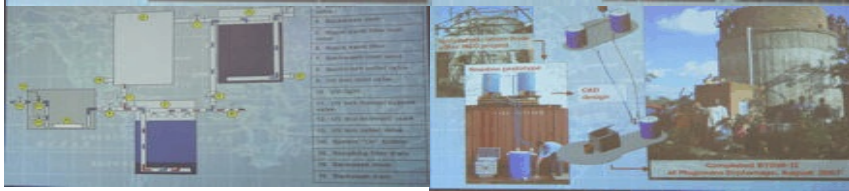
- Muramba**
 - 300 Watt solar panel and five CFL lights at Muramba Clinic for delivery and delivery rooms
 - Installed electrical system at Muramba College for women girls to be able to study at night
 - Muramba College bus business helps to increase gas rate from 20% to 50% now that girls don't have to carry water during the day, and get extra of night
- Mugonero**
 - Installed 600 Watts and 10 CFLs for hospital
 - Two lights for surgery
 - One for surgery station, one for surgery prep, two for delivery room, one for maternity, four for labor, two for office, one for internet only
 - During visit, monitor work and suggest use of solar powered lights to finish work

Rainwater Catchments

- Muramba College - May 2005
 - 12,000 liters of storage provide 535,000 liters of capacity
- Mugonero Hospital - June 2006
 - 10,000 liters of storage
- Mugonero Orphanage - August 2007
 - 6 x 10,000 liters of storage
 - Should provide reliable source of water for all orphanage residents throughout the year


BYOW-I, June 2006

- "Bring Your Own Water" Treatment System**
 - Gravity roughing filter / rapid sand filter / UV powered UV bulb
 - Expelled off-scale-high turbidity and bacteria count and reduced it to nearly 0 CFU
 - Maintenance cost is less than \$ 20 per liter




Astronaut Presentations

- NASA Astronaut volunteered and took leave to participate in January 2006. NASA wouldn't authorize presentations, but was allowed to present about his own life to secondary school and orphanage.




EWB-USA Project Funding

- All EWB-USA chapters raise funds on a per project basis
- Military Clubs
- United Nations
- USAID
- EPA
- NASPE
- University Outreach / Development Funds
- Private Donations




Carbon Emission Reductions

- Manna Energy Foundation aligned to take EWB-USA experience in Rwanda, and partner with UNDP, Rwandan Government to install 472 systems in next two years at all secondary schools.
- Funded by Kyoto CERs
 - Each liter of water treated by BYOW or bedded on cookstoves is a measurable reduction in wood burning emissions
 - Systems will fund themselves and provide business opportunities for Rwandans while addressing critical public health concerns



New Development Model

- This new model for hydrophilanthropy is unique in the humanitarian development field
- Traditional development organizations, rely on government, UN, or charity grants, and have finite funding with specific goals for discrete projects.
- Instead, under this model, economic sustainability and expansion is generated only by the continued use of the installed projects. There is a direct incentive to ensure that the projects are successful, in that these same projects serve to fund further development.
- No longer is there a disconnect between funding and public health goals.
- The Manna Energy Foundation is pioneering this venture, as the first organization ever to attempt to qualify for United Nations carbon credits based on the treatment of water to address public health needs.

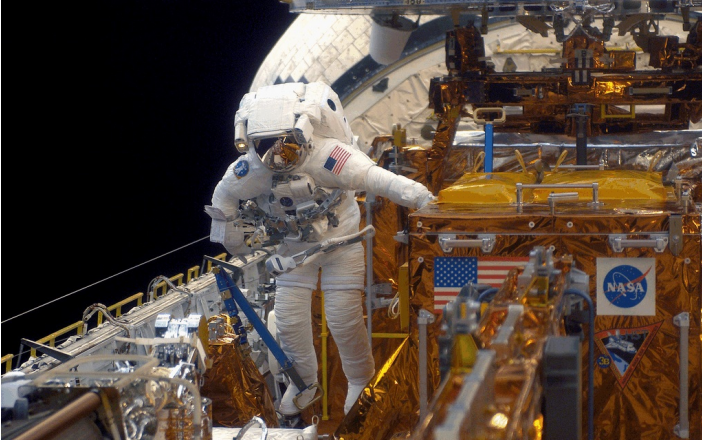


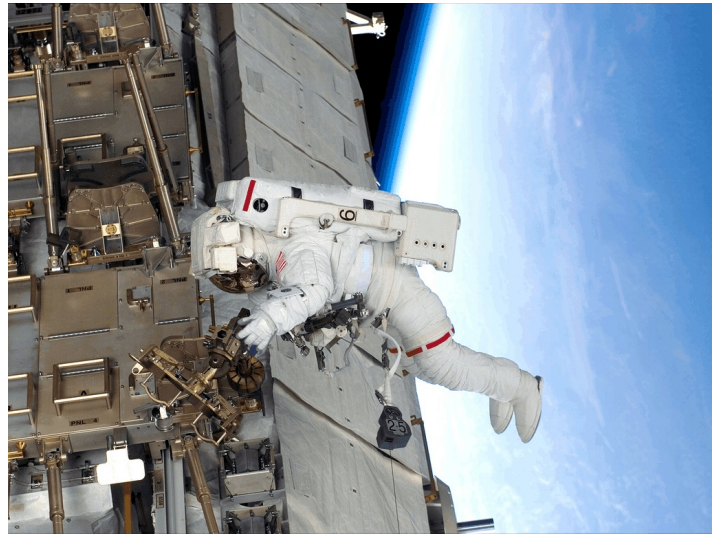
Personal Impact




There are 280 chapters of Engineers Without Borders in 40 countries.

Pics from the recent Space Shuttle Mission. Wow! This editor has photographers everywhere!





This is an update on former SCRC President, John Watson's death:

Joan Geissler talked to Carolyn (John's wife). She is doing fine. John did not die from Alzheimers. It was some neurological complication. Some of the doctors believe it may have been caused by Agent Orange. An autopsy was not performed because of family time problems; i.e., they could not wait around for another week or so. Send cards to:
Carolyn Watson
5100 John D. Ryan Blvd.
Apt. 247
San Antonio. TX 78245