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2015-16 Rotary Leadership ROTARY INTERNATIONAL

K.R. "Ravi" Ravindran International President Rotary Club of Colombo

Western Province, Sri Lanka

DISTRICT 5180

Glenn Fong
District Governor
Joe Scheimer
Assistant Governor
Area 8

CLUB OFFICERS/ DIRECTORS Gene Long President

Dominic Mecklenburg

President Elect

David M. Stone
Vice President/Programs

Dominic Mecklenburg

Treasurer

Roland Wright Secy./Club Admin.

Jeff Donlevy Community Service

Bob Meyer International Service

TBA

Vocational Service

Patrick Magnani Youth Services Membership

Maureen McBride Sgt. At Arms Rotary Foundation

The Highlander

THE ROTARY CLUB OF FOOTHILL- HIGHLANDS

Chartered March 12, 1959



January 4, 2016 Volume 58, Issue 23

Rotary 2016 Rose Parade Float Working Together for Peace





District Governor Glen Fong walking alongside the float.

CALL TO ORDER

President Gene Long began the meeting promptly at 12:15 p.m. Our Official Greeter was PP Bob Meyer. Leading us in the pledge was President Gene. PE Dominic Mecklenburg provided the invocation. Richard Hansen was the note taker.

VISITING ROTARIANS AND GUESTS

Joining us today were Rotarian Sherie Tobin from the Rotary Club of El Dorado Hills, Bob Barabino, a retired Air Force pilot and one of our scholarship recipients Katitlyn Ballinger. Also joining us were our speakers Mike Lord and Stephen Keese from EFD Corp.

ANNOUNCEMENTS

January Board Meeting

This month's board meeting will be on **Tuesday**, **January 12th** at **5:30 p.m.** at the Umpqua Bank in Antelope.

Just a reminder: All members, NOT just Board Members, are invited to attend.

Night at the Museum

We have secured the California Railroad Museum for our major fundraiser of the year. Mark your calendars for **Friday**, **April 22**, **2016**.



All members are asked to provide at least **two items** for the **Balloon Pop.** The value of each item should be at least \$20. These items should be

given to **Dominic**.

Our first **Balloon Pop** was received today from PP **Roland Wright.**

Members are also asked to provide **one item** for the **silent auction**.

Sponsorship Coordinator PP **Patrick Magnani** announced this year's first sponsor is **Umpqua Bank** for a Bronze Sponsorship of \$250.

www.night-at-the-museum-rotary.org

Dictionary Distribution

President Gene announced that dictionaries have arrived and he will be arranging to affix the labels and to arrange the distribution.

Club Communications - Richard Hansen

rch6242@comcast.net 916-332-7448

Rotary Club Address

P.O. Box 6 North Highlands, CA 95660-0006

CLUB WEBSITE: www.foothillhighlandsrotary.org/

(ClubRunner)

DISTRICT 5180 WEBSITE: http://rotary5180.com



Join Us On Facebook

DONATE TO HELP OUR ROTARY CLUB SUPPORT LOCAL CHARITABLE AND NONPROFIT CAUSES.

EIN 68-0392810, PayPal link on Club Website: http://www.foothillhighlandsrotary.org/

Foothill-Highlands Rotary Club Foundation is a non-profit 501(c)(3)organization.



Drive change. Donate a vehicle today.

Click here to donate now

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E-Waste4Good Program

You can bring anything, anytime to Umpqua Bank or PE **Dominic Mecklenburg** is happy to collect your "electronic junk" on Mondays at our regular meetings. If you would like to schedule a pickup at your home or office location, just let him know!

More information on page 10

To date, we have received a total of **\$373.62** for our E-waste Project for this fiscal year.

Rotarian At Work Shirts

PE **Dominic Mecklenburg** announced the shirts are here. There are some extras so contact **Dominic** if interested in purchasing one.

SCHOLARSHIPS

PP **Patrick Magnani** presented a \$500 scholarship to **Katitlyn Ballinger.** She had an opportunity to tell us where she is attending school and a little bit about herself.



Katitlyn Ballinger and Patrick Magnani

ANNUAL GIVING/PAUL HARRIS SUSTAINING FELLOWS

We continue in our goal to have **every Rotarian** contribute at least **\$100** to **The Rotary Foundation** and strive to achieve the status of 100% EREY and 100% Paul Harris Sustaining Fellows for the second year in a row.

To date, we have fifteen (15) paid Paul Harris Sustaining Fellows who have bonged the gong for \$100. Each paid sustainer has received a special sticker for their badges.

We're on our way to reaching our goal of being a 100% Paul Harris Sustaining Fellow Club.



Support The Rotary Club of Foothill-Highlands by shopping at AmazonSmile. Amazon will donate 0.5% of the price of your eligible AmazonSmile purchases when you shop at AmazonSmile.

Use this link:

https://smile.amazon.com/ch/68-0392810

CALENDAR OF EVENTS

UPCOMING PROGRAMS AND EVENTS JANUARY IS VOCATIONAL SERVICE MONTH

CLUB CALENDAR:

JAN.11 ROTARACT CLUB COMING TO UPDATE

US ON WHAT THEY HAVE BEEN UP TO

THIS YEAR AND THEIR SERVICE

PROJECTS.

JAN. 12 BOARD MEETING

JAN. 18 NO MEETING, MARTIN LUTHER KING

DAY

JAN. 25 TBA

DISTRICT 5180 CALENDAR:

MAY 19-22 DISTRICT CONFERENCE

DOUBLE TREE HOTEL/BERKELEY

MARINA

JUNE 5 ROTARY RIVER CATS DAY

WEEKLY ASSIGNMENTS

MONDAY, JANUARY 11, 2016

GREETER: MARILEE MONAGAN

PLEDGE: DOMINIC MECKLENBURG

INVOCATION: SONJA CAMERON

NOTE TAKER: RICHARD HANSEN

JOKES

PP **Bob Spears** had a joke, but no fine-free pass.

FOUNDATION NEWS

END POLIO NOW CAMPAIGN



Our goal this year for Polio giving is \$1,000. We continue to have our **END POLIO NOW** banks on the tables at our weekly meetings.

We ask that you —-

BRING YOUR CHANGE FOR CHANGE.

The **END POLIO NOW** campaign is one of Rotary International's top priorities this year. Rotary and the Bill & Melinda Gates Foundation have extended their partnership during the critical endgame phase of the Global Polio Eradication Initiative. Thanks to this partnership our contributions are matched two for one—\$25 becomes \$75.

At today's meeting, we collected \$16.36 from the banks bringing our grand total to \$359.33 toward our goal of \$1,000.

REMEMBER: Anyone who donates \$25 or more gets a special End Polio Now pin.

ROTARY FOUNDATION BENEFACTORS

NAME

Donlevy, Jeff Hallsten, John Hansen, Richard Kaiser, Joe Lipp, Gordon Long, Gene Magnani, Patrick McBride, Maureen Mecklenburg, Dominic Meyer, Bob Monagan, Marilee Morgan, Cheryl (Sam) Spears, Robert B. Stone, David M. Wiggins, Lee N. Wright, Roland

A Benefactor (has contributed \$1,000 to the Permanent Fund or made provisions in their will of at least \$1,000 benefiting The Rotary Foundation).



Of the things we think, say or do

- 1. Is it the TRUTH?
- 2. Is it FAIR to all concerned?
- 3. Will it build GOODWILL and BETTER FRIENDSHIPS?
- 4. Will it be BENEFICIAL to all concerned?

BELL RINGERS, GONG BONGERS PAUL HARRIS FELLOWS

Jordan Backhaus		PHF
Sonja Cameron	(GRIF)	PHF
Warren Coffeen		PHF+ 1
Jeff Donlevy	(B)	PHF
John Hallsten	(B)(GRIF)	PHF+ 5
Richard Hansen	(GRIF)	PHF+ 6
Joe Kaiser	(B)(GRIF)	PHF+ 7
Gordon Lipp	(GRIF)	PHF+ 2
Gene Long	(GRIF) (\$100 Polio +)	PHF
Gene Long Sr.		
Patrick Magnani	(B)(GRIF)	PHF
Maureen McBride	(GRIF)	PHF+ 8 +
Dominic Mecklenburg	(B)(GRIF)	PHF+ 7
Bob Meyer	(B)(GRIF)	PHF+ 4
Marilee Monagan	(GRIF)	PHF+ 2
Sam Morgan	(B)	PHF+ 4
Bob Spears	(B)(GRIF)	PHF+ 2
David Stone	(B)(GRIF)	PHF+ 5
Lee Wiggins	(B)(GRIF)	PHF+ 4
Roland Wright	(B)(GRIF)(GRIF)	PHF+ 5

Bell Ringer & Gong Codes:

(B) = Bell Ringer hi\$100 to Club

(GFHF) = Gonger \$100 to Club Foundation

(GRIF) = Gonger \$100 to RI Foundation

(RIF) = \$100 to Rotary Foundation

A Paul Harris Fellow is an individual who contributes \$1,000 to the Rotary International Annual Program Fund or other approved programs. Each additional \$1,000 contribution is recognized with a plus and the number.

FINES AND RECOGNITIONS

President Gene filled in for Fine Master **Maureen McBride** today. He began by calling on PP **David Stone** who had a wedding anniversary. **David** spun the wheel for \$8.

Gordon Lipp had a Club anniversary. He spun the wheel for \$3.

Jeff Donlevy's daughter had a birthday. He spun the wheel for \$5.

President Gene had a happy thought. He had jury duty last month and was on standby for only four hours. **Gene** spun the wheel for \$8.



HIGHLIGHTS OF THIS WEEK'S MEETING

PP Patrick Magnani introduced Mike Lord, EFD's Vice President of Engineering. Mike was responsible for designing and building the first EFD Corp. desalination plant, designing modifications for subsequent plants. and arranging third-party manufacturing of components and assembly. Mike has a background working in the engineering industry for companies such as Hewlett Packard, Fairchild Semiconductor, Notifier Corporation and others. Since 1970, he has worked in the areas of design, engineering and physics. His first patent, US 3919528 A, was applied for in 1972 and issued in 1974, titled "Method and apparatus for operating authorization control systems." Mike has extensive expertise electronic control systems, thermodynamics, math and physics. His latest issued patent is US 8496787 B2 "Method and apparatus for effluent free sea water desalination." This patent holds the promise of producing abundant low-cost drinking water for the world without the environmental damage caused by brine discharge. In 2014, Mike formed EFD Corp. to make his technology available to the world. He has a B.S. degree in Electrical Engineering from the University of Nebraska.

Patrick then introduced **Stephen Keese**, EFD Corp.'s Vice President of Government Affairs. **Stephen** focuses on team building and promoting the company's technology to potential licensees and government officials.

For over 25 years, he lived and worked in Silicon Valley with large and small companies including Apple and Adobe and founded several startups. Before moving to California, he was a technology scout and change agent for John Hancock Insurance in Boston. He

has served as a Board Member of several local, national, and international non-profit organizations.

Stephen has a MEd from Cambridge College and a B.A. degree from Harvard College.

The Problem The Scarcity of Fresh Water

Over 783 million people do not have access to clean water. Desalination presents an obvious answer to the global water shortage. The market for an environmentally-friendly desalination solution is especially critical in arid coastal regions such as California, where an estimated 80 percent of the state is experiencing extreme drought.

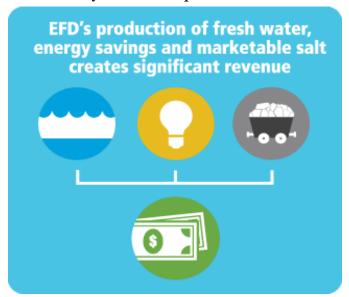
Current Desalination Technologies

Existing desalination technology can be categories: grouped into two thermal distillation and reverse osmosis. Thermal distillation processes account for the majority of desalinated water, but advances in reverse osmosis technology in the past two years has increased the utilization of this filtrationbased process. Both systems produce a brine byproduct that threatens marine life and the benthic zone (ecological region at the lowest level of a body of water) ecosystems when discharged into the ocean.

Reverse osmosis is the process of separating dissolved salt and fresh water by forcing fresh water through an osmotic membrane, leaving a salt concentrate on one side of the membrane and fresh water on the other. This requires substantial amounts of energy to overcome the osmotic pressure and force the water to pass through the membrane.

The EFD Solution

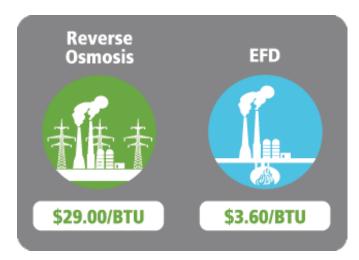
EFD Corp.'s technology borrows from and improves upon existing desalination methods in several unique but critical ways. EFD Corp. technology solves the scaling problem by separating the heating of the water in one chamber from the vaporization of the water in a different chamber. After being heated under pressure in the heating chamber, the sea water is released through a nozzle into a flash chamber where the decreased pressure causes the sea water to separate into steam, water and salt. The salt and water fall to the bottom of the flash chamber, where the salt crystals are removed via a conveyer belt and the water is refed into the heating chamber. This allows the system to separate the steam from the salt without creating scale or brine, producing only crystallized sea salt that can be sold commercially to increase profits.



EFD Corp. technology reuses the heat of the steam to solve the problem of wasted thermal energy. After separating from the salt and water in the flash chamber, the steam is diverted and compressed. After compression, the vapor enters a heat exchanger and provides 95% of the thermal energy required to heat the sea water in the heating chamber. The remaining 5% of energy which is lost in the system (makeup energy) is provided by the compressor. After exchanging heat with the sea water, the vapor is then condensed as fresh water. This reuse of the latent heat of vaporization provides 90 to 95 percent of the thermal energy with only about five percent of

the total energy being lost to radiation and other losses.

The five percent make-up energy is provided by a vapor compressor that is fueled entirely by natural gas providing the solution to the issue of high electricity costs. Because natural gas is 7.4 times cheaper than electricity, a utility-scale EFD Corp. desalination facility powered by natural gas can produce water at an approximate cost of \$844.10 per acre-foot, compared to the typical \$2,000 per acre-foot cost of producing water through other desalination methods.



EFD Corp.'s technology not only produces fresh water and sea salt without creating brine, it is able to do so at a dramatically reduced cost by using natural gas. Therefore, EFD Corp.'s patented technology solves both major problems associated with desalination—cost and environmental impact—thus providing a revolutionary solution to the global fresh water crisis.

Web Site

http://efdcorp.com

Select for:

EFD Corp.'s technology VIDEO

Following the presentation, **Mike** answered questions from the Rotarians and guests.



Stephen Keese, President Gene and Mike Lord

As is our usual custom, **President Gene** presented the speakers with gifts in gratitude for their informative presentation.

President Gene then asked us to stand, raise our glasses and join him in a toast to *Rotary Around the World*.

The meeting was then adjourned.

DISTRICT NEWS

2016 District Conference "Come Dressed To Play"

Don't Miss The Fun



Rotary 0



Where: DoubleTree by Hilton Berkeley, CA

When: May 19-22, 2016

Registration Fee: \$40 per person

Limited Event Availability



No Deposit Refunds After July 1, 2015







Why Attend?

- . Enjoy Friendship with Fellow Rotarians
- Explore the Bay Area
- Great Speakers
- Great Entertainment







E-WASTE RECYCLING IS HERE!

THIS IS A GREAT OPPORTUNITY FOR YOU TO GET RID OF SOME UNWANTED CLUTTER AND HELP OUR CLUB RAISE SOME MONEY. THEY WILL ACCEPT ANY PIECE OF ELECTRONICS INCLUDING TV'S, COMPUTERS, APPLIANCES, CORDS, KEYBOARDS, MICE AND EVEN POWER TOOLS. THE HEAVIER THE BETTER (WE GET PAID BY THE WEIGHT!) ANYTHING WITH A CORD IS ACCEPTABLE, AND THEY TAKE THE CORDS TOO. THEY SEPARATE AND RECYCLE THE PLASTIC, METAL...EVERYTHING! IF YOU HAVE ITEMS TO DONATE, GIVE ME A CALL TO COORDINATE THE PICKUP. SOME ITEMS I CAN COLLECT AT OUR WEEKLY MEETINGS TOO! IF YOU HAVE FRIENDS OR RELATIVES THAT HAVE SOME E-WASTE, I CAN ARRANGE FOR A FREE PICKUP FOR THEM TOO!

THIS IS AN ONGOING PROJECT. CONTACT DOMINIC FOR MORE INFORMATION.

You can also call eWaste-4good at 800-317-3112 and tell them proceeds are to go to The Rotary Club of Foothill-Highlands.

Drive change. Donate a vehicle today.

It will be sold at auction, and we will get the proceeds.

Your donated vehicle will provide critical funding to our charity and further our mission while supporting our goals. Even better, by donating your vehicle - you could also earn a tax deduction.

We have a partnership with the IAA Donation Division to process and sell the vehicles donated to us. They provide us with a simple solution to turn donated vehicles into much needed dollars.

The process of donating your vehicle is quick and easy - simply call 800-240-0160 or visit us online at foothillhighlandsrotary.org. Better yet, towing is free and scheduled for your convenience.



Your donation has another great benefit - it is good for the environment. We share your commitment to a cleaner, greener environment - and donating your car ensures it is recycled via many different channels!

Not every "vehicle" is a car - but every vehicle, in any condition, can be donated!

Not every "vehicle" is a car, but every donation helps!

We accept every type of vehicle, including:

- Cars
- Boats
- Snowmobiles
- · Heavy equipment

- Trucks
- Motorcycles
- · Personal watercraft

The process is easy. Here's how it works:



Call 800-240-0160

- Tax deductible
- Free towing
- · Any vehicle, any condition

Program Powered by the IAA Donation Division.

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ROTARY CLUB OF FOOTHILL-HIGHLANDS

Drive change.

Donate a vehicle today.

Click here to donate now

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