

Minutes RCOH November 8, 2022 meeting

**President Lyla Berg** called the November 8, 2022, zoom meeting of the Rotary Club of Honolulu to order at 12 noon and welcomed members and visitors. **Nancy White** led the Pledge of Allegiance, and **Kent Reinker** sang “Where I Live There Are Rainbows.” An inspiration by **Carolann Biederman** wove together her appreciation of documentaries and today’s election, citing in particular the Ken Burns documentary “Not for Ourselves Alone.” President Lyla sent members into breakout groups to discuss what do rainbows mean to you; what does democracy mean to you and what does living in Hawaii mean to you.

**Maja Grajski** introduced the speaker, Dr. Steven Businger, a professor of Atmospheric Sciences at UH. For 30 years he has contributed to the understanding and detection of atmospheric storms. Quite naturally he knows much about rainbows, leading to his speech topic, “The Secrets of the Best Rainbows on Earth.” With a slide presentation, his talk covered four areas:

- 1) The cultural and historical significance of rainbows in Hawaii
- 2) The science behind rainbow phenomena
- 3) Why is Hawaii the rainbow capital of the world
- 4) Chasing rainbows

1) Dr. Businger began with the Hawaiian words for rainbows, most known is anuenuē. However, there are many more Hawaiian words for the various kinds of rainbows. To early Hawaiians the rainbow is a symbol of transformation or pathways between the earthly and heavenly realms. He described early rainbow-related Hawaiian legends.

2) The first scientist to write about rainbows was Aristotle, who thought they were related to clouds. Arab scientists attributed the source of rainbows to the water droplets in the clouds. With explanatory diagrams, Dr. Businger described the light and geometry phenomena that produce the various kinds of rainbows. Among the aspects about rainbows that he explained are why morning rainbows are high in the sky and that they set as the sun goes higher in the sky, and that double rainbows have the colors reversed. With pictures he showed and explained full-circle rainbows that one may see from helicopters.

3) The three general reasons why Hawaii has so many rainbows are that we have bright sunshine, terrain enhancement and good geometry. Using pictures of Hawaii’s mountains and of clouds driven by the trade winds, he explained Hawaii’s optimum conditions for rainbows. At the droplet level, he explained why our clean air also contributes to the formation of rainbows.

4) To chase rainbows, it helps to have wide angle lenses and helicopter rides. As the climate changes, the higher latitudes will have more rainbows and the lower latitudes fewer. Dr. Businger has developed the free RainbowChase app, to help one find when and where there may be a rainbow.

Maja and President Lyla both thanked Dr. Businger for his interesting presentation. President Lyla announced next week’s meeting with Herb Lee, Jr. speaking and located at the Outrigger Canoe Club. She directed people to the *Tradewind* for birthdays, anniversaries, and upcoming events, then closed the meeting with the Desmond Tutu quote: “Do your little bit of good where you are; it’s those little bits of good put together that overwhelm the world.”

The meeting was adjourned. **Nancy White**, Scribe.