

"knowledge isn't power,  
applied knowledge is power"



FALL 2022-2023  
VOLUME 2, ISSUE 1

## A QUARTERLY NEWSLETTER CELEBRATING TUSTIN HIGH SCHOOL'S TECHNOLOGY & ENGINEERING PROGRAM

### 2022 BOEING INTERNS

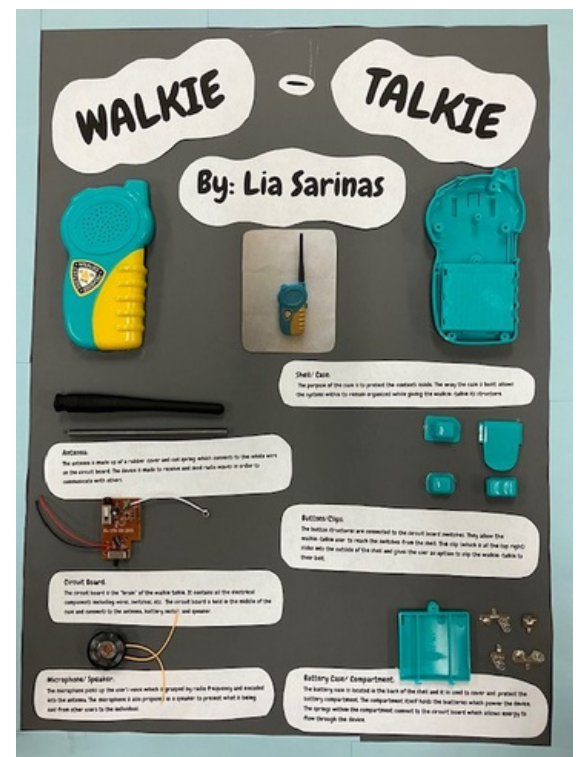
This is the eighth year for Tustin High School's participation in the Boeing Summer Engineering Internship Program. Held in person at the Boeing Huntington Beach facility, students work with professionals in the fields of aerospace, manufacturing, communications, satellites, and more. It is an amazing opportunity to learn what can never be taught in the classroom. Only 13 schools participate in the program with a total of 65 interns each summer. Most schools get 4-5 spots each summer, but because we're awesome, we sometimes get more. This year THS had the most interns with six!



From left to right: Tiffany Rivera, Vincent Ngo, Matt Bach, Neil Ong, Tim Evans, Josh Higareda

### WHAT'S IN THE BOX?

Most people don't know what is inside some of our everyday gadgets. What is something made of? How does it work? Wow, it has motors inside? Is that a circuit board? Taking things apart is an amazing way to learn how things work. For many of our 9th graders, this was the first time using a screwdriver! Our project is based on a freshman engineering class at MIT, where students take apart a commercial product down to the individual bolts. From Nerf toys to old video game controllers, our students will never look at things the same way again. By the way, they were all supposed to ask for permission before taking something apart - our apologies if that didn't happen!



## OLD SCHOOL DRAFTING

Back in the dark ages before computers (BC), Engineers and designers drew everything by hand with what we now call traditional drafting techniques. Although the bulk of our 10th grade class is spent on computer 3D modeling, our first few weeks are spent learning the basics of Orthographic Projection, Isometric views, line conventions, etc. using T-squares, triangles and templates on wood drawing boards. By doing this, they'll gain a better understanding of our modern computer-based tools. So, before we jump into SolidWorks and 3D printing, we're going back to basics!



## ALUMNI SPOTLIGHT

In this issue, we highlight Angelica Verde, Tustin High School class of 2017 and UC Irvine class of 2021. A top student while at Tustin, she was in MUN and was also part of the summer Boeing Internship. Following her four years in T-Tech, Angelica followed up with a degree in Mechanical Engineering and now works at Hyundai-Kia as a Ride and Handling Engineer. "My work involves subjective evaluation of Hyundai-Kia cars, documenting the performance of a vehicle under different conditions and tuning them to have a more comfortable ride and robust handling." Fittingly, Angelica was also part of T-Tech's electric vehicle competition team! We're very proud of you - go Tillers!



## Upcoming Events

UTT middle school Fall Festival - October 14th

STEM On The Sidelines w the LA Chargers - December 10th

\*\* We only have three T-Tech Parent Booster meetings a year! So, if you missed our first one, our next meeting will be on Monday, January 23rd at 6:00 pm in the T-Tech shop. We plan on having a THS alumni and their parent speak to our group about their T-Tech experience.

Contact Mr. Hernandez with any questions at [ehernandez@tustin.k12.ca.us](mailto:ehernandez@tustin.k12.ca.us)