

February 24, 2016

Evelyn Fan Encarnacion
San Diego Chapter of INCOSE



Dear Evelyn,

Thank you so much to INCOSE for awarding Warren-Walker Middle School the INCOSE STEM grant this year. The WWMS SeaPerch Club is so grateful for your generosity, as our program would not be what it is today without the support of INCOSE.

SeaPerch is an innovative underwater robotics program. This program provides students with the opportunity to learn about robotics, engineering, science, and mathematics (STEM) while building an underwater ROV as part of a science and engineering technology curriculum.

Status Report: This year we have 42 students in the Warren-Walker SeaPerch Club. As our program has developed and matured, so have our students' goals and aspirations for the ROVs. This year many teams wanted to begin to make custom modifications for their rovers to improve their maneuverability and effectiveness. By combining the funds given by INCOSE with other funds, we were able to purchase our team an UpBox 3D Printer and filament (images on next page). Students are now actively designing custom parts using CAD software and printing them for their ROV. This is an exciting development for our program! It has opened up a whole new type of creative engineering for our students. They now have more tools to creatively problem solve. The ROVs have to accomplish many unique tasks in this year's competition. With the addition of the 3D printer, students are thinking of these problems in new and innovative ways. We are so grateful to be able to provide these kinds of opportunities to our students! An additional bonus is that the 3D printer is also available to the greater student body, and teachers are already thinking about how they can put it to use in their classes as well! The school student body is 120+ students.

We are looking forward to this year's competition. Last year's INCOSE grant contributed to WWMS's great success in both the San Diego Regional and National SeaPerch competitions. We are hoping for the same level of success again this year – or more! Thank you so much for your generous contribution to our program.

Sincerely,

Science Teacher & Website Administrator
Warren-Walker Middle School

Evidence



UpBox 3D Printer



First Test Print
(bunny)



First Modification Design
(propeller)