

# CALIFORNIA SCIENCE & ENGINEERING FAIR 2018 PROJECT SUMMARY

Name(s)

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**Project Number** 

J0317

**Project Title** 

**Baby Alert** 

### **Abstract**

## Objectives/Goals

I am creating a bathtub drainer to help save babies from drowning in a bathtub when left unattended. I named it the Baby Alert because there is an alarm that is attached to the prototype that will alert the parents by lighting up and sounding. The prototype will also retract the plug to drain the water from the bathtub save the child from drowning. There are about 393 children that die in bathtub drownings per year. I am hoping that my prototype will help lower the drowning and save more innocent lives.

## Methods/Materials

Baby Alert Prototype was built with materials that were purchased from varies hardware stores. The materials that were used to build the prototype were a metal chain, wooden box (that was built by me), drain plug, metal puller, motor, relay, timing relay, alarm, light and a float switch.

#### Results

The Baby Alert Prototype worked as planned. When the floater was activated by mimicking movement, the arm attached to the floater set off the alarm. When the alarm lit up and sounded, the plug retractor activated and coiled back.

#### **Conclusions/Discussion**

Baby Alert Prototype could give that extra second or minute that is needed to prevent a child from drowning. The light up alarm is not only sound alerting but visually so the adult knows that something is wrong. It also, can remove the water by unplugging the bathtub so the child does not stay in the water which can cause them to drown. When deciding to create my project I wanted to see if there were others that were similar in the market. There were a few that did alert, but did not prevent in the same way as Baby Alert does. Such as Safety Turtle Pool Alarm System only sounds an alarm to prevent the child from going near the water. Baby Alert allows the child to be in the water and alert the adult when the child is in danger of drowning.

### **Summary Statement**

My Baby Alert Prototype showed that it can alert yet assist in saving a child from drowning.

## Help Received

I built and created my prototype by myself with some assistance by my father.