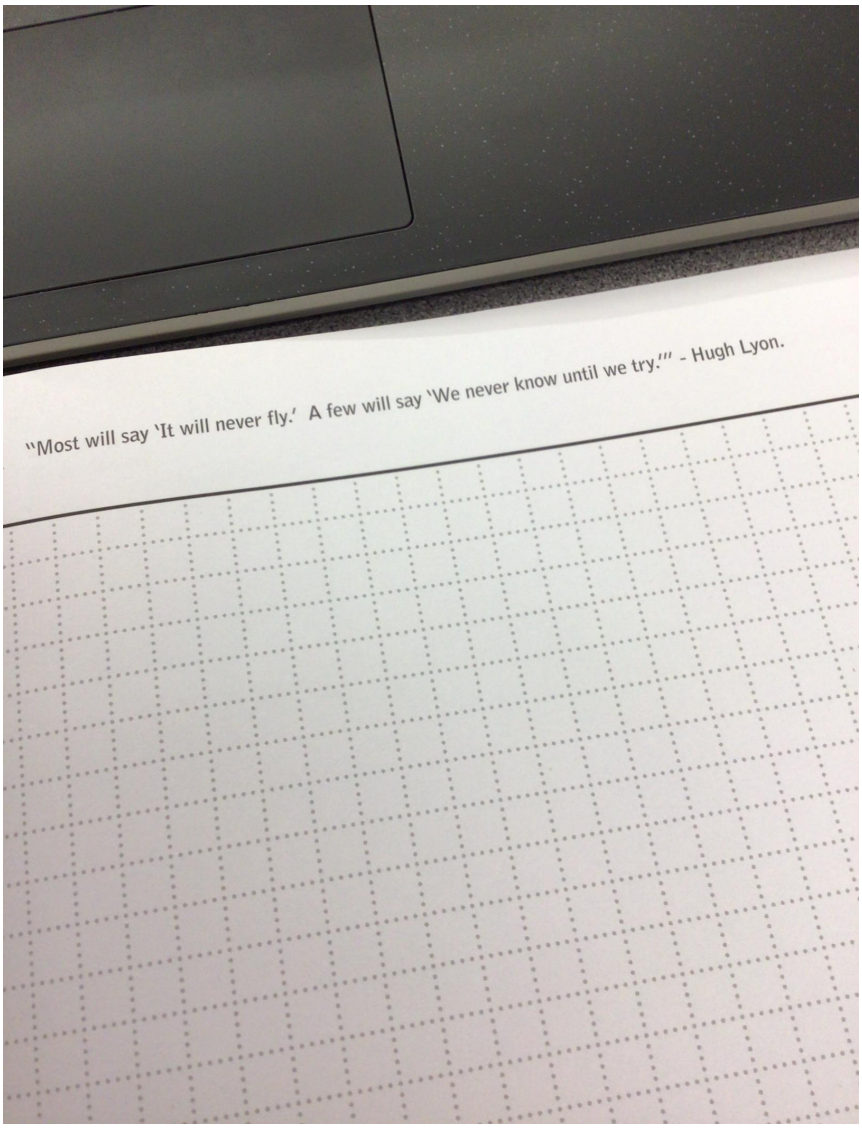
Fly!
Cheryl, Annie, Ellie
18266A
Houston, TX

Brief description of poster:

The poster design was inspired by the quote in the VEX engineering notebook:



When a person looks at the poster, the first thing they will notice is the text “Most will say ‘it will never fly.”. If they are willing to look from a different direction (perspective) they will find a tinier text that says “A few will say ‘We never know until we try.”. The theme of our poster is that it is acceptable to try and fail, but it is not acceptable to not try because “no one has done it before”.

The story behind the poster:

We decided to document the design and experiment process of our robot for this season's game Tipping Point, and offer our answer to the question "why robotics?".

Looking at the past VEX IQ and VRC seasons our team members have played before creating this team, there seems to be a "dominating design" appearing each year around mid November that most teams will follow. This "dominating design" is so good that starting at regionals, you will see 4 (or 2) identical robots driving around the field at almost every match.

However, Tipping Point is different. After looking through countless robot reveals, we found out that most teams focused on mobile goals, and only a few designs aimed for scoring rings on higher branches. In this year's game goals are a priority, as you will never be able to score rings if you cannot possess goals.

With these pieces of information in mind we still began to brainstorm designs that will score rings on neutral branches. 4-bar? Cascade lift? Scissor lift?

We crossed out countless ideas until we came across the last option: A ring launcher that throws rings and hangs them on branches.

Playing through the season, we heard a lot of advices:

"Doesn't throwing rings have the most variability?"

"No one has ever done this before."

"Building a do-everything-bot is difficult. Robotics competitions are designed to make that difficult."

"You should focus on getting more mobile goals rather than trying to get rings into neutral branches."

"If this doesn't work before February you should probably stop throwing rings."

All of these ideas are valid, and we are very thankful for receiving these suggestions as they offer us alternative perspectives we may have not thought of. In fact, we were never confident that a ring launcher would work, but at this point it is really not about getting an advantage at matches anymore. It is about attempting to solve a challenge, about doing something fun.

Why robotics?

It accepts more than one solution.

It presents opportunities for sharing creation.

Most important of all, It has a place for crazy ideas, ones that really don't seem to work at first sight, but have the potential to become magical.