

As a result, we have to use a 5.5w motor to drive the elevation mechanism. So we adjusted the gear ratio of elevation mechanism to a 1:5 ratio, totaling a 25-fold reduction, to withstand the increased force required to stretch the rubber bands.

After testing, we found that this gear ratio could fully withstand the tension of the rubber bands, though the speed was slightly slower.

However, we believe that in the Asia Championship, the Robot can make more use of side elevation. And if we can reserved sufficient time, the C-level elevation can be achieved.

## 10/1 NEW CATA-MECHANISM

Today we focused on studying the new cata-mechanism.

In the previous version of the Robot, we placed the cata-mechanism behind the elevation-mechanism. However, during the competition, we encountered situations where the Robot overturned unexpectedly, and the elevation arm could't rotate to the back.



project V7. cata

designed by: Kevin

witnessed by: Steven

date: 1-10