



HOT AIR BALLOON EXPERIMENT

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PURPOSE:

- To make a hot air balloon that will fly and loft a camera to map an area.



WHY IS A HOT AIR BALLOON BETTER THAN HELIUM?

- There is no need to tap into helium resources and then release them into the environment.
- Hot air is free so there is no need to pay for helium and there is as much of it as you need.



PROTOTYPE IDEAS AND FLAWS

- Trash bags and tape instead of welded plastics
- Super light weight clear trash bags (this may have been a mistake black would have kept the heat inside the bag)



TESTING

- After the hot air balloon was built we filled it up with a blow dryer and kept the hot air flowing in and the cold air out and after a little while the balloon started to pull and eventually it lifted off the ground. When we did this test it was inside and outside it became a little more challenging. We created a rig to hold a flame and when we set that up the balloon had already begun to deflate and the flame wasn't strong enough and the ape was melting and everything was melting. It became a mess. So that test failed.



WHAT DID IT LOOK LIKE?



ITS OFF THE GROUND!!!!



ADVICE

- Make a smaller balloon. A balloon this size is hard to heat and continuously keep in the air.
- Use a frame. If there is structure and a larger distance between the plastic and the flame it is less likely to melt.
- Don't use duct tape to hold anything together that includes fire because it will melt.

