

## Riding on a Cloud

used with Lucky Starr, David Starr- Space Ranger, by Isaac Asimov

In the Lucky Starr books, Lucky and Bigman often move around in an aircar, which floats just above the surface of the planet they're on. This is actually used now on Earth to move boats on water, and by NASA to move large satellites like the Hubble Space Telescope around in the laboratory before they're put into orbit.

They only work well on planets or moons that have atmospheres though. As you experiment with this tabletop model, see if you can figure out why.

After you build the basic model, try the following adaptations:

- make one that will go in a straight line
- make one that will lift higher
- make one that will work over a rocky surface
- make one that will go for a long period of time (this will help with the question somewhat)
- try one in a vacuum chamber (you may need to find out how to make one from a physics teacher or on the web) Is it possible?