

# Balloon Helicopters

A **balloon helicopter** is a flying toy consisting of a latex [toy balloon](#) and a plastic [propeller](#), derived from the simple [balloon rocket](#). The most important feature is the hollow propeller hub which directs air into a passage in each propeller blade. The air passages channel air to the blade tips such that air escapes in a fine jet tangentially. The air jets on the blade tips causes the entire toy to spin, the blades have a positive angle of attack so the blades experience a lifting force as they push air downwards. It can attain a height of approximately 12 meters (40 feet). Full-scale helicopters have been built around this [tip jet](#) configuration.



**Competition: can your helicopter can stay in the air the longest?**