

Paper Propeller

Tullio Crali (1910-2000) was a Futurist artist whose work is most associated with the genre of 'aeropainting' which celebrated the mechanics and sensations of flight which dominated Futurist research in the 1930's. He depicted dynamic perspectives, multiple viewpoints and combined both figurative and abstract elements to express the experience of flight. This simple activity show you how to make a long distance 'Harrier' paper aeroplane to explore the science of aerodynamics and design.



Tullio Crali, Tricolour Wings, 1932



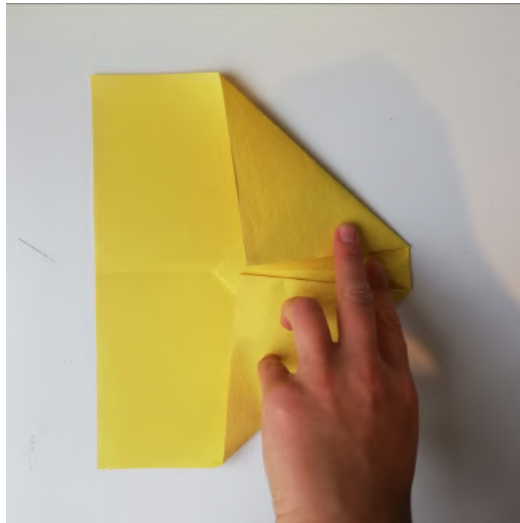
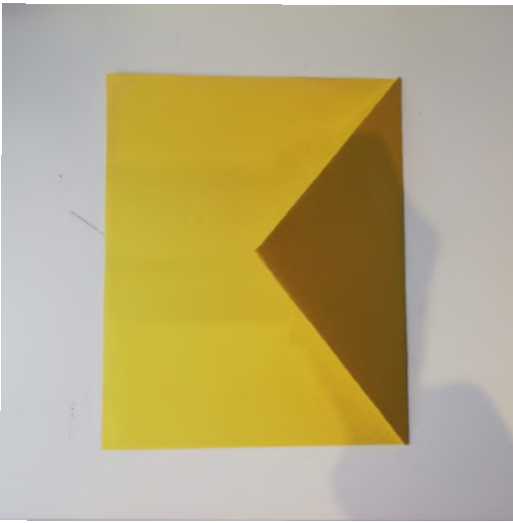
Tullio Crali, Roarings of an Aeroplane, 1927

- 1) Fold 1 A4 paper lengthways.
- 2) Fold the corners on one side to the folded line.



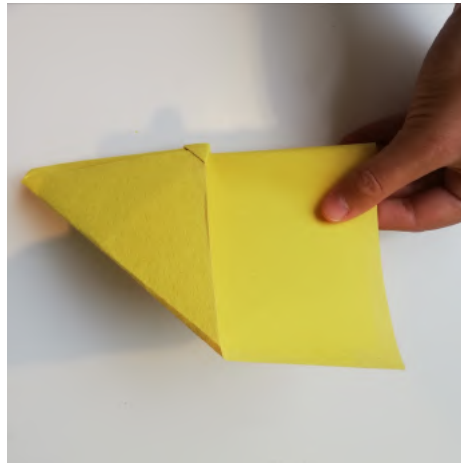
3) Fold over the triangle.

4) Leaving half an inch in the middle, fold the corners into the middle.

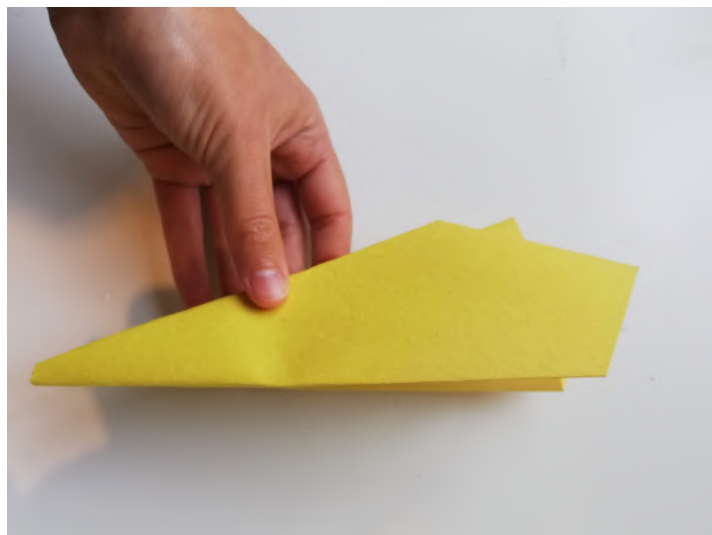
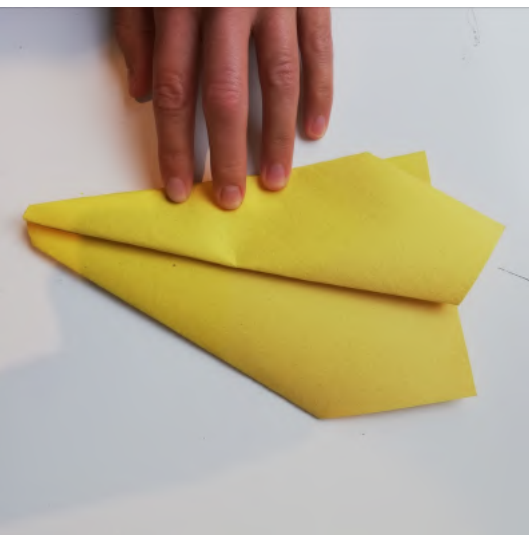


5) Fold the little triangle flap back on itself.

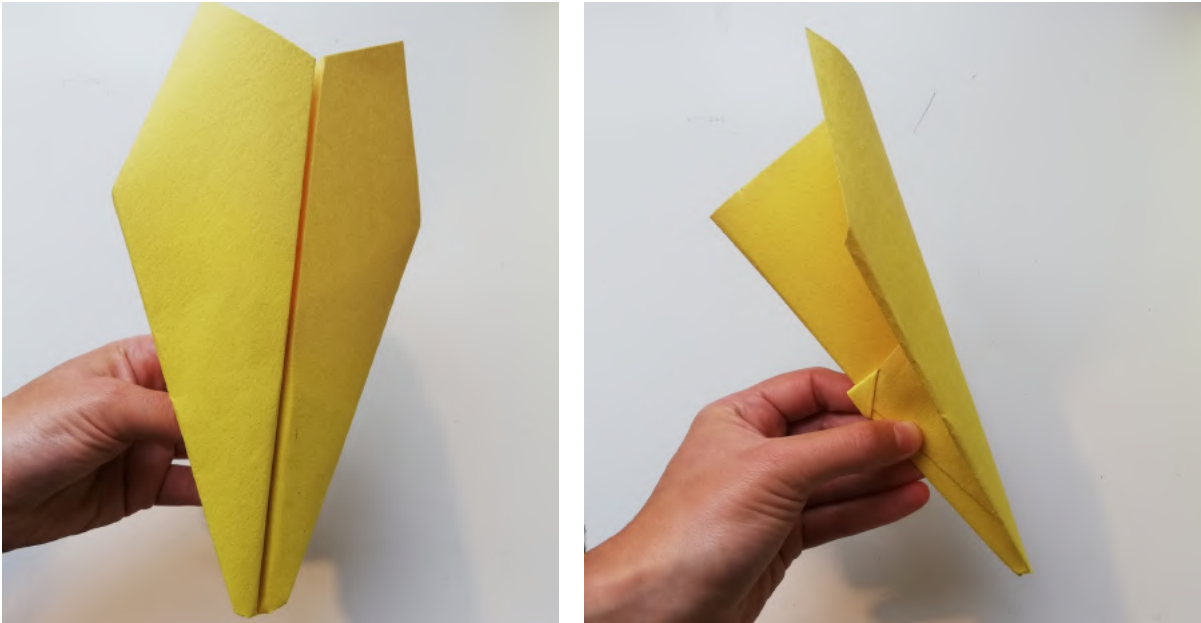
6) Fold the plane in half with the triangle flap at the bottom.



7) Fold the wings down



8) Hold the plane at the triangular fold underneath and let it fly!



Top Tip: Make your folds as clean and sharp as possible. Printer paper works really well for this.

Experiment: Measure out and record how far your plane travels each time and see how you can adapt it or throw it differently to go further.

Research: What can you use your plane for? You could use it to messages to neighbours or try making small and large version. What are the pros and cons of gliders vs. Engine run planes.

Paper Propeller

Tullio Crali was a Futurist artist whose work embraced technology and machinery as important sources of creative inspiration. His work was well known in the genre of 'aeropainting' which celebrated the technologies, sensations and perspectives of flight. Explore the power of wind by making your own paper propeller.



Tullio Crali, Broken Propellor, 19..



Tullio Crali, Johnathan Monoplane, 19..

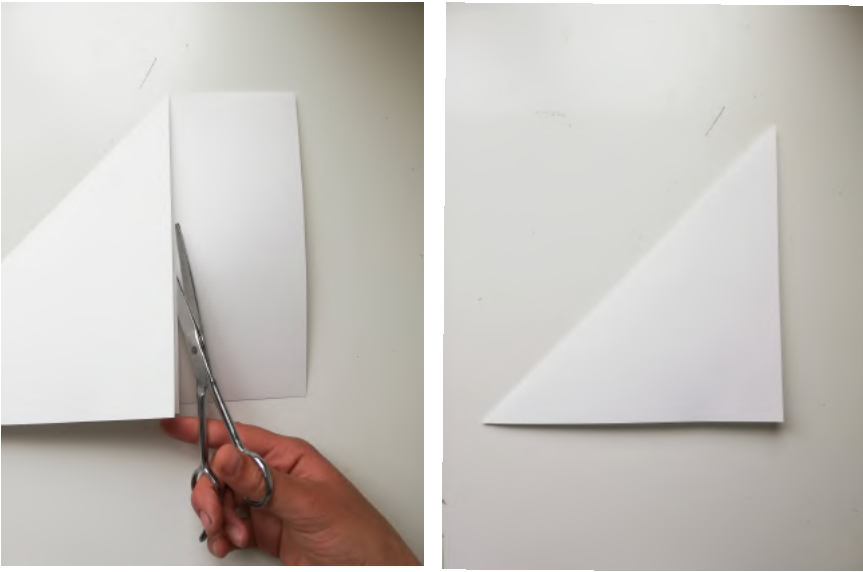
You will need

- 1 A4 or square piece of paper
- 1 drawing pin
- 1 wine cork
- 1 wooden skewer

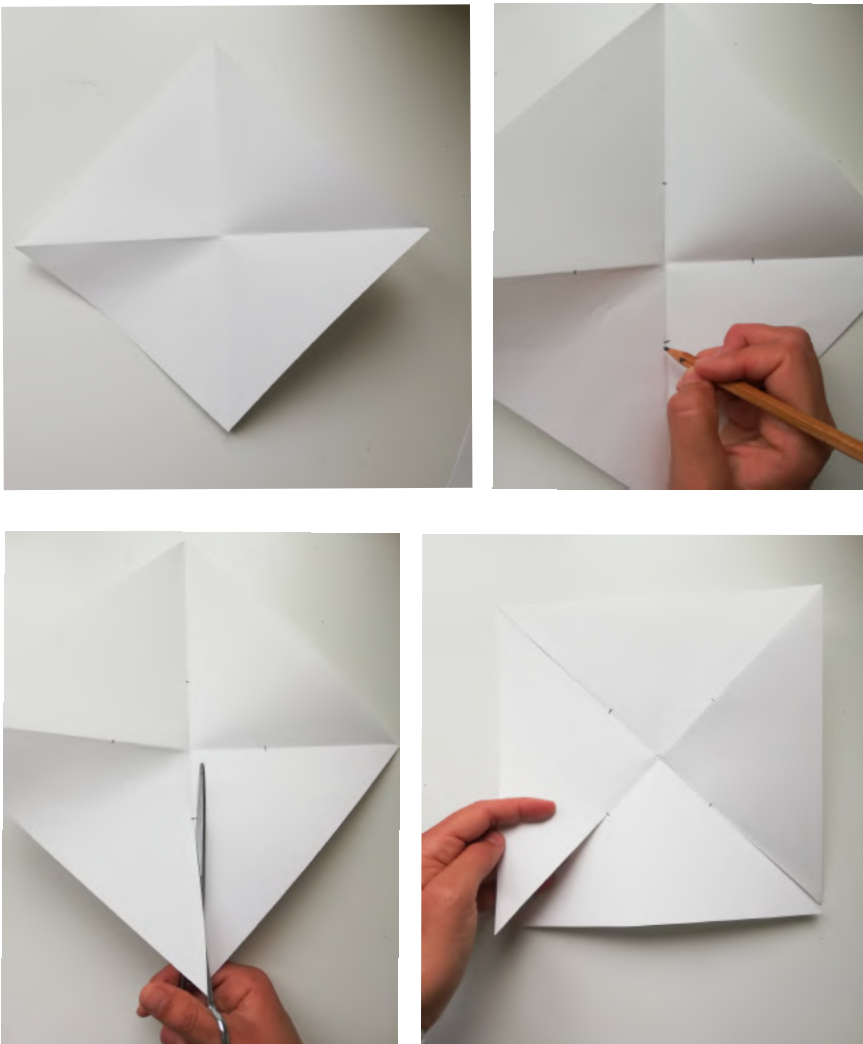
1) Take an A4 piece of paper and fold one corner to the edge of the paper to make a square.



- 2) Cut or carefully tear the excess paper off.
- 3) Fold the triangle again and open it up.



- 4) Make a pencil mark 1/3 from the centre on each fold and cut along the lines to it.



5) Bring alternate corners of the square to the centre and hold them together with the pin



6) Push the pin into the cork but leave a gap to leave some space for the propellor to spin.

7) Push the skewer into the bottom of the cork. If it doesn't have a sharp end you can dig out a little hole with a pin and push and twist the stick into the cork.

8) BLOW into your propellor and watch it spin.



Top Tip: Don't push the drawing pin all the way into the cork to ensure you leave a gap between the paper and the cork so it can spin freely.

Experiment: What other sources of wind could you use? You could try a hairdryer or take it to a park. Try making one from recycled plastic and keep it outside to tell you how windy it is from inside your home. You could try decorating the paper before you construct it or make one from coloured paper and see how the patterns change when they spin.