

# Design of the Paper Helicopter

Emilio Lopez

August 20, 2021

## 1 Obtaining the Helicopter

The paper helicopter is a widely used example for training in Quality Methodologies. It was first mentioned in [Box(1992)].

A pdf document with a template of the paper helicopter design (see Fig. 1) is located in the folder `doc` of the `SixSigma` package. It can be also obtained with the command `vignette("HelicopterInstructions")`.

Print it in A4 paper without adjusting to the paper size to get the correct dimensions.

You can also generate a copy of the pdf document in your working directory with the function `ss.heli()`:

```
> library(SixSigma)
> ss.heli()
```

## 2 Assembling the Helicopter

Follow the instructions in the template (Fig. 2): fold by the continuous lines and cut the discontinuous lines, depending on the prototype you want to build.

The yellow strips are for tape, the green strip is for paper clip. These materials are optional.

## References

[Box(1992)] George Box. Teaching engineers experimental design with a paper helicopter. *Quality Engineering*, 4(3):453–459, 1992.

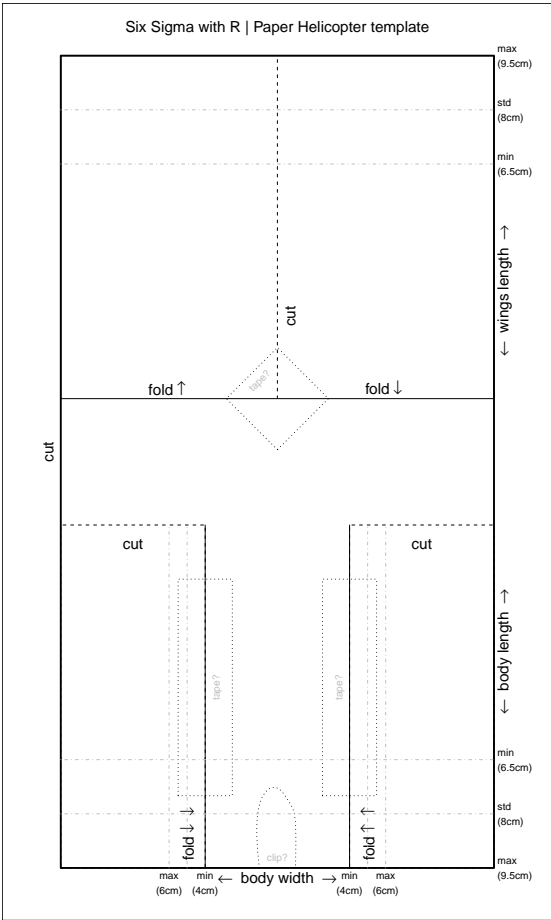


Figure 1: Paper Helicopter template.

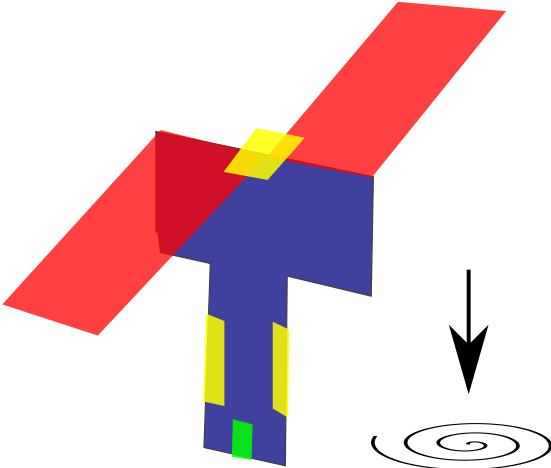


Figure 2: Paper Helicopter Diagram.