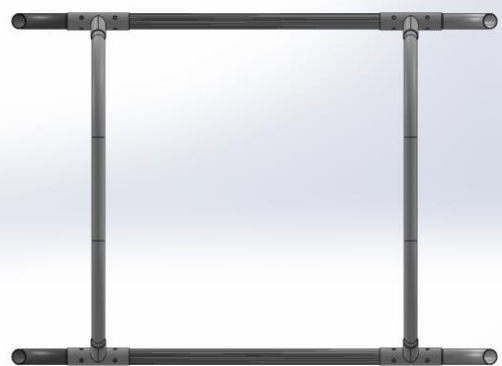
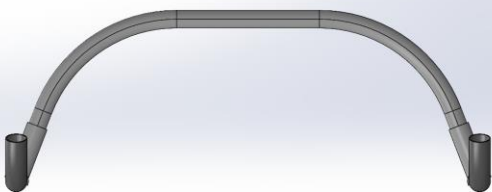
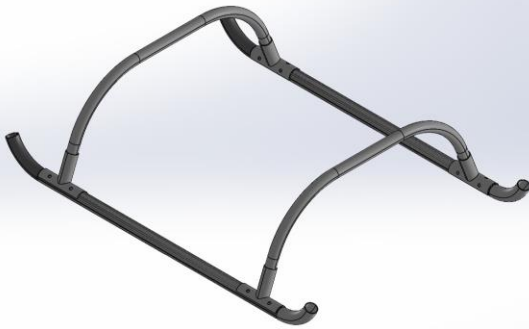


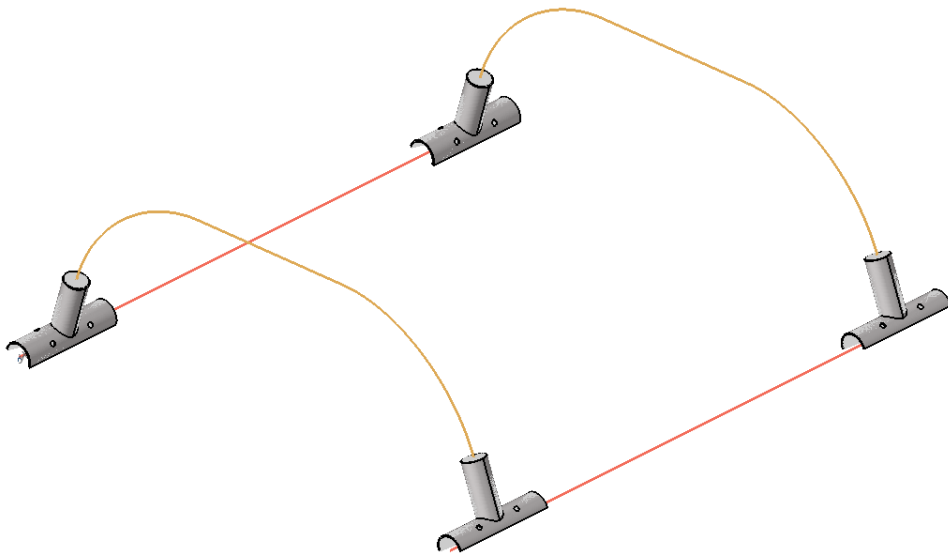
# Prototyping: *Landing Gear, Horyzn Drone*

*1. Step: CAD modeling (Catia 3DEXPERIENCE):*



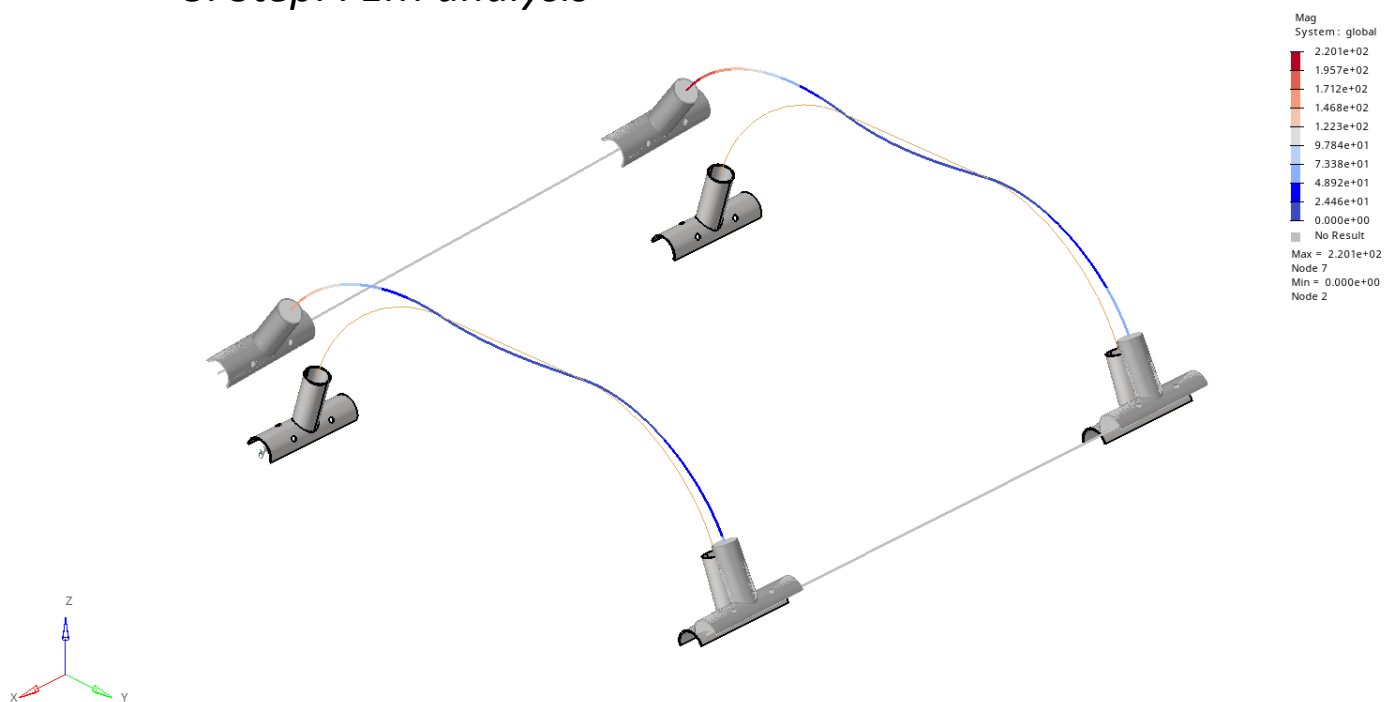
# Prototyping: *Landing Gear, Horyzn Drone*

*2. Step: FEM modeling, converting beams into 1D mesh elements to allow quick interchanging of cross sections (Hypermesh, Optistruct)*



# Prototyping: *Landing Gear, Horyzn Drone*

## 3. Step: *FEM analysis*



## Prototyping: *Landing Gear, Horyzn Drone*

*4. Step: Manufacturing (1/2) (done together with the team)*





## Prototyping: *Landing Gear, Horyzn Drone*

*4. Step: Manufacturing (2/2) (done together with the team)*



# Prototyping: *Landing Gear, Horyzn Drone*

*5. Step: Testing (done together with the team)*

*Drop test:*

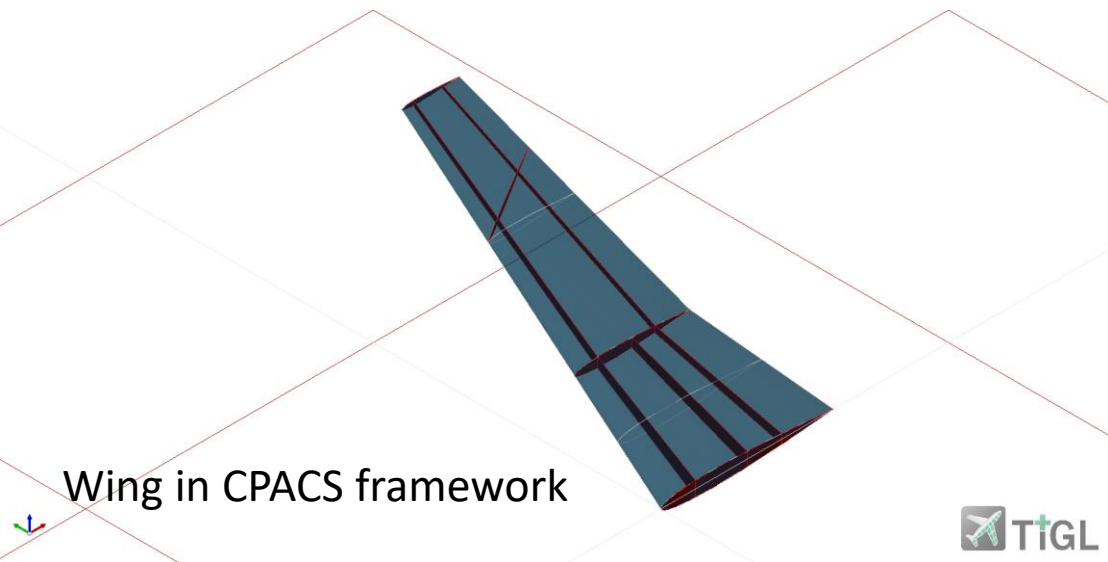
<https://youtube.com/shorts/Kpsl9FThIVs?feature=share>

*Flight test:*

<https://youtube.com/shorts/SeqNtlHW7CI?feature=share>

## Currently working on my Bachelor's Thesis: *Automatised Parametrisation and FE Meshing of an Aircraft Wing Box*

For my thesis I am developing a code that converts a wing which is defined by DLR's CPACS framework into a wing box in Nastran. A static analysis will automatically run and the results will be extracted and interpreted.



Wing meshed with pyNastran (in progress)

