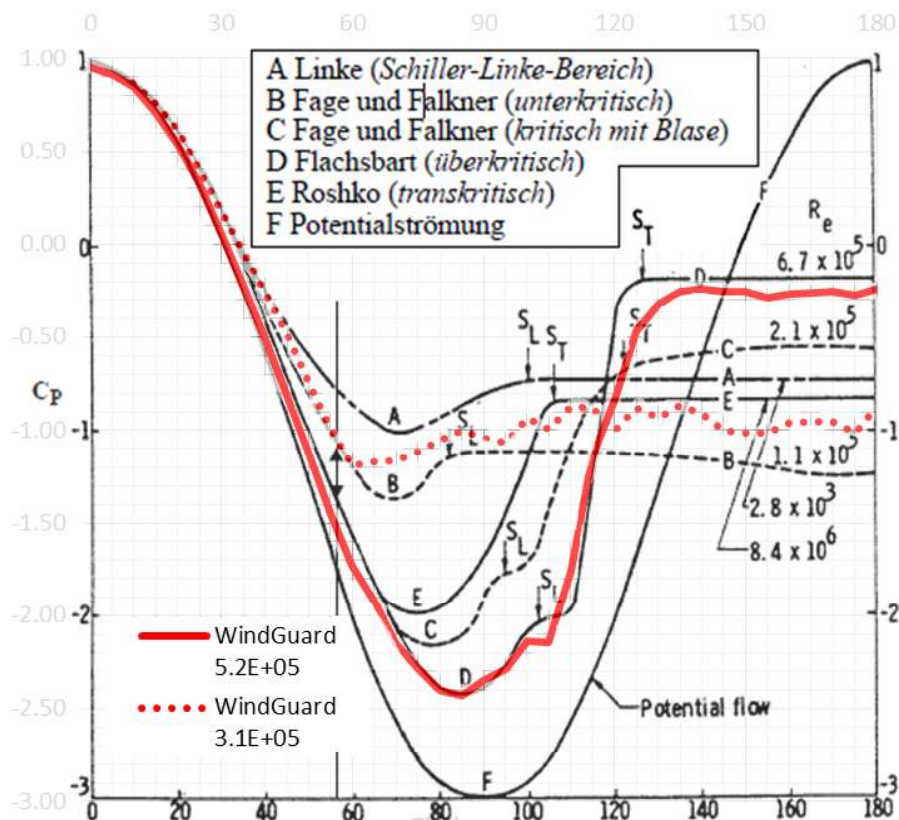Proposal 3 for a Master-Thesis:

Tower and root section of blades have cylindrical shape.
A critical region (in Reynolds number) is 300 k to 600 k. See pressure
plot below [1].

The thesis consists in setting up (with help from my group) an
OpenFOAM case for a Large Eddy Simulation (LES) [2,3] and to
investigate transition and separation.

References:

[1] https://iopscience.iop.org/article/10.1088/1742-6596/753/7/072006/pdf

[2] fluids-06-00024.pdf
[3] J. Fröhlich et al, Large Eddy Simulation of Flow around Circular Cylinders on Structured and Unstructured Grids