

Test Class

```
LSAerodynamicsManager.CalcCLAtAlpha theCLWingCalculator =  
theLSAnalysis.new CalcCLAtAlpha();  
  
cLIsoaltedWing = theCLWingCalculator.nasaBlackwellalphaBody(alphaBody);  
  
theLSAnalysis.PlotCLvsAlphaCurve(subfolderPath);
```

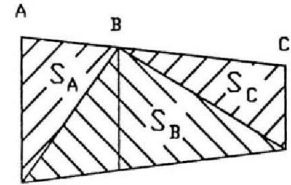
LSAerodynamicManager

Output

CalcCLAtAlpha

CL at alpha

nasaBlackwellCompleteCurve



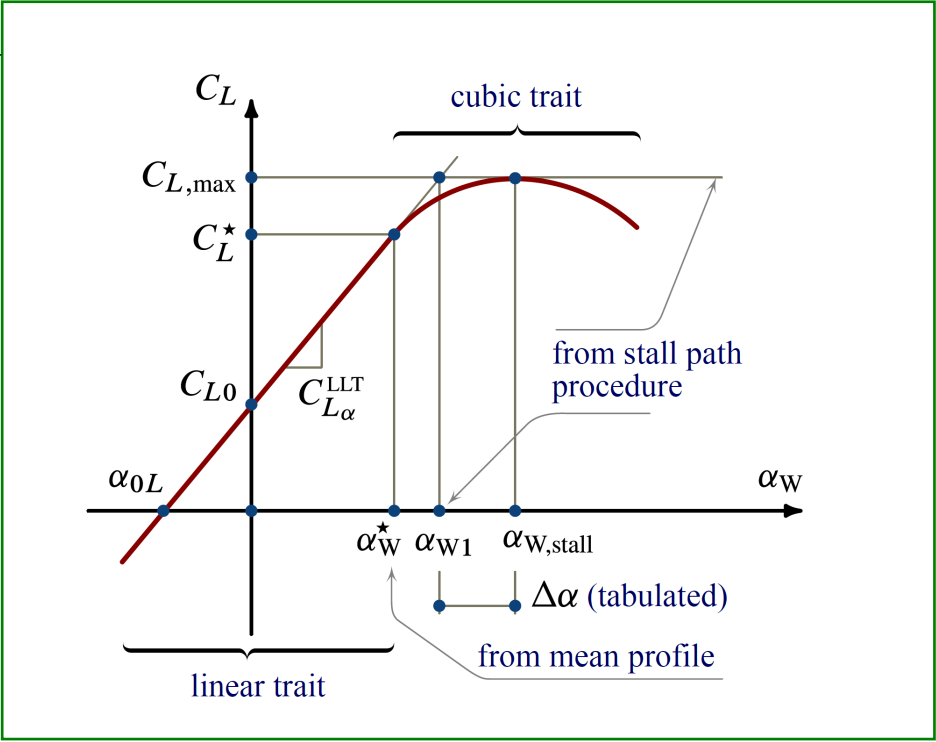
Mean Airfoil

Nasa Blackwell method

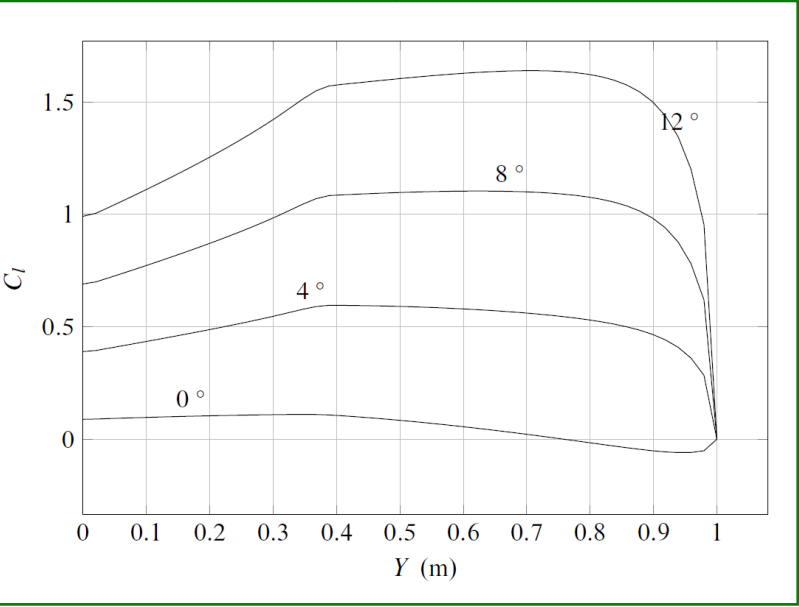
α^*

CL_α
CL_max
α_max

This method calculates CL at alpha given as input.
This method calculates both linear trait and
non linear trait.
It use the NasaBlackwell method in order to evaluate
the slope of the linear trait and it builds the non-linear
trait using a cubic interpolation.



NasaBlackwell

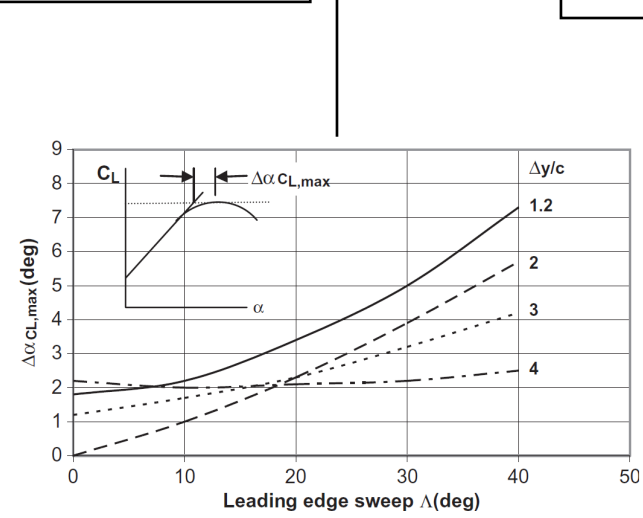


CalcCLMaxClean

This nested class uses NASA-Blackwell method
in order to estimate the lifting surface CLmax
through the stall path.

α_max

CL_max



plot

plot

This method draws the CL vs alpha plot