

uefc Optimization Tool

A simple tool for optimizing the UEFC aircraft.

Usage

```
$ uefc
```

Command line arguments:

- `--iter N`: run N iterations
- `--threads T`: run the simulated annealing on T threads
- `--fix [name value]*`: fix variable name to value
- `--help`: display a help menu

Variables

- `n`: Load factor (unitless)
- `r`: Turn radius (in meters)
- `m`: Payload mass (in grams)
- `tau`: Thickness ratio (unitless)
- `lambda`: Taper ratio (unitless)
- `a`: Aspect ratio (unitless)
- `s`: Planform area (in m²)
- `dihedral`: Dihedral angle (in degrees)

License

Developed by Joseph Hobbs, 2023.

Thanks to Adrian Lozano-Duran for mathematical models.

All code in this project is licensed under the MIT License.