Assignment 1.

The aim of this assignment is to investigate and document the components and properties of a specific helicopter. This information will be necessary for the completion of following assignments on helicopter performance and flight dynamics.

You should choose a type of helicopter that has a conventional rotorsystem and for which the following information is readily available.

For your choice of helicopter, identify the following:

1. Geometry: rotor diameter, number of blades, blade chord, blade section. Identify any significant variation that may exist along the span of the blade. Fuselage length, weight of helicopter and tail configuration.


3. Control System: Describe linkage system from pilot controls to the the various actuators on the rotor and anti-torque system.

4. Rotor Hub: Type of blade attachment mechanisms. Position and function of control linkages. A sketch of the hub layout is mandatory.

5. Gearing to engine or tail rotor, if applicable.

“not a recommended choice of helicopter” -->

George Cayley, 1804

(should take about 6 hours of research to complete) (drawing may be extra)