

REPORT UPON THE EFFICIENCY OF KITES A B & C:- by P.W. Baldwin.

The measure of efficiency of a Kite is generally considered as the ratio between lift and drift. The lift is the sum of the forces acting in a vertical direction at the kite; and drift the sum of the forces acting in a horizontal direction at the kite.

If the drift be considered as the horizontal force (comparable to the thrust exerted by the propeller of an aerodrome) then the lift represents the weight sustained.

The most efficient aero-surfaces are those that support the greatest weight for a given drift; or, in other words those in which the ratio lift divided by drift is greatest.

In our case the lift includes the weight of the kite, the weight of the flying-lines, and the vertical component of the pull; and the drift is the horizontal component of the pull.

The vertical and horizontal components of the pull are proportional respectively to the sine and cosine of the angle of altitude.

Interpreting the data relating to Kites A B & C in this way we arrive at the following conclusions concerning the relative efficiencies:-
