

For the Wright: $Tt. = \frac{P \times V}{H} = \frac{83 \times 16}{0.675} = 1965$ kilograms or 26 H.P.

For the Voisin: $Tt. = \frac{127 \times 17.50}{0.66} = 3370$ kilograms or 45 H.P.

These two horse-powers are substantially those of the two motors of Wright and of Voisin. Finally it seems to us that it would be preferable to compare the usefulness between those of the aeroplanes of different types, that is to say, the coefficient of utilization of an aeroplane is the ratio of the utilized weights transferred to the total weights, multiplied by the speed of advance (which is proportional to the space traversed) and divided by the free effective power on the shaft of the motor and expressed in horse-power.

The formula would be then:-

$$U = \frac{P_u \times V}{P_t \times H}$$

Let us apply this formula to the Wright and Voisin machines, we shall find:

$$U = \frac{70 \text{ kgs.} \times 16 \text{ m.}}{450 \text{ kgs} \times 26 \text{ H.P.}} = 0.096 \text{ for the Wright}$$

and

$$U = \frac{140 \text{ kgs} \times 17 \text{ m.} 50}{640 \text{ kgs} \times 45 \text{ H.P.}} = 0.085 \text{ for the Voisin}$$

Remarks: We have taken 140 kgs as utilized weight in the Voisin, on account of the supporting chassis which it possesses (76 kilograms) and which would render inexact the comparison with the Wright if allowance for it is not made.