

# Flight Planning

Factors Affecting Flight process:

Ground coverage

Purpose of the survey

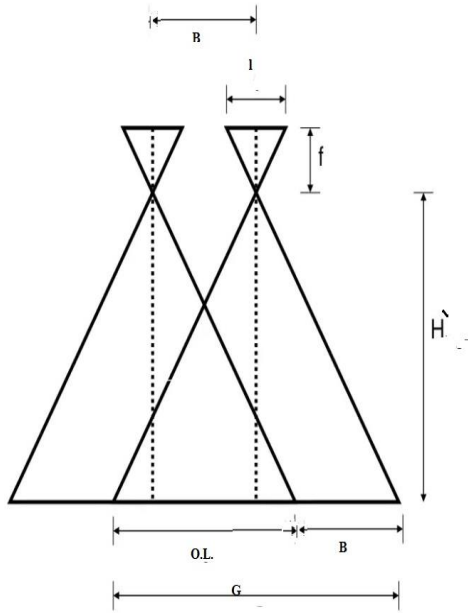
Overlap and sidelap requirements

Scale requirements

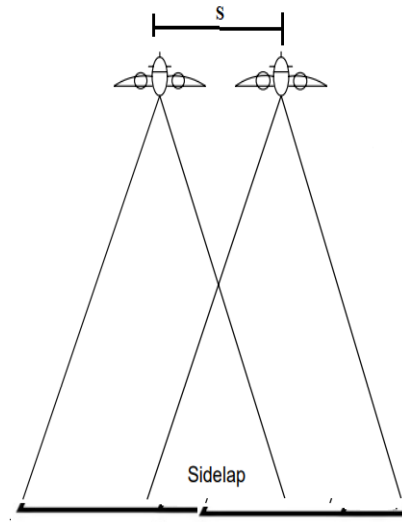
Weather conditions and Wind effects.

# Flight Planning

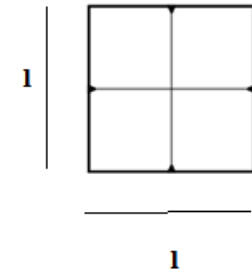
$$\text{Image Scale} = I / G = f / (H - h_{av})$$



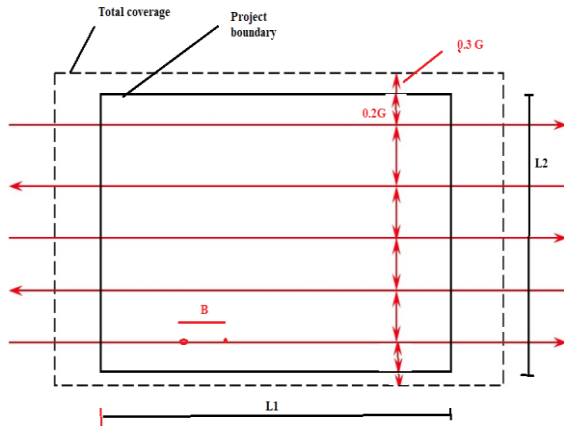
$$\text{O.L.} = \frac{(G-B)}{G} * 100$$



$$\text{S.L.} = \frac{(G-S)}{G} * 100$$



# Flight Planning



$$S = (1 - (S.L.)/100) * G$$

$$B = (1 - (O.L.)/100) * G$$

$$n_1 = (L_2 - 0.4 G) / S + 1$$

$$n_2 = (L_1 / B) + 4$$

$$n = n_1 * n_2$$

Example : A rectangular area of miles 10 in the north-south direction by miles 6 in the east-west direction is to be covered with aerial photography having a scale of 1:4000 . Endlap and sidelap are % 65 and % 25 , respectively. A camera having a (9inches ) square format is used. Compute the total number of photographs in the project