This sounds like a Poisson Process. If the probability of observing a plane in 3 hours is 0.6, then

$$1 - e^{-\lambda t} = 0.8\lambda \approx 0.916 \tag{1}$$

where t is a 3-hour period and λ is an expected value.

The probability of observing a plane in 1 hour is approximately equal to 0.26.

$$p = 1 - e^{-0.916\frac{1}{3}t} p \approx 0.26 \tag{2}$$

We can derive the same result using another approach. The probability of not observing a plane in 3 hours equals to the multiplication of probabilities not observing a plane in each hour:

$$(1-p)(1-p)(1-p) = 0.4 \tag{3}$$

Therefore,

$$p \approx 0.26 \tag{4}$$