This sounds like a Poisson Process. The probability of observing 0 planes in 3 hours:

$$\frac{e^{-\lambda}\lambda^k}{k!} \implies \frac{e^{-\lambda}\lambda^0}{0!} \implies e^{-\lambda} \tag{1}$$

If the probability of observing at least 1 plane in 3 hours is 0.6, then

$$\begin{aligned} 1 - e^{-\lambda} &= 0.6 \\ \lambda &\approx 0.916 \end{aligned} \tag{2}$$

where λ is an expected value.

The probability of observing at least 1 plane in 1 hour is approximately equal to 0.26:

$$\begin{aligned} p &= 1 - e^{\frac{-0.916}{3}} \\ p &\approx 0.26 \end{aligned} \tag{3}$$

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

$$(1-p)(1-p)(1-p) = 0.4 \tag{4}$$

Therefore,

$$p \approx 0.26 \tag{5}$$