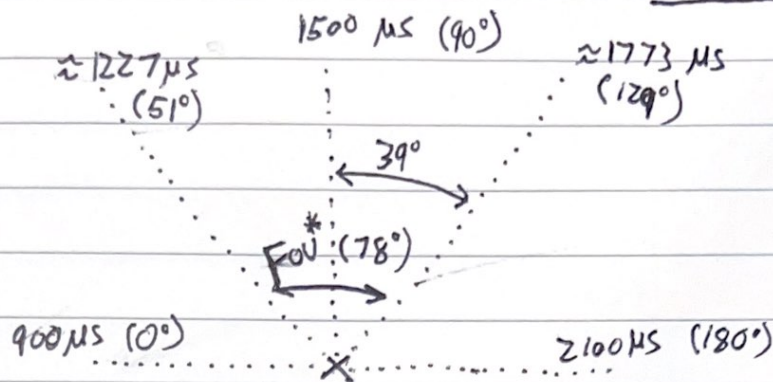


3/15/22 Pixel  $\rightarrow$  angle  $\rightarrow \mu s$  translation for  
turret servo:

\* FOV = Camera field of view | Camera Pixel width = 670 pixels



$\therefore$  therefore,  $1^\circ \approx 7 \mu s$ . An example:

Let  $x = 89$

$$\rightarrow 89 / 670 = 0.133$$

( $x$  is 0.133 the length of the frame from the right.)

$$\rightarrow 0.133 \times 78^\circ = 10.36 \approx 10^\circ$$

( $10^\circ$  from  $51^\circ$  - see diagram)

$$\rightarrow 51^\circ + 10^\circ = 61^\circ$$

To get microseconds:

$$900 \mu s + (61 \times 7) = \boxed{1327 \mu s}$$

$\therefore$  therefore, we would tell the x-axis  
servo to write 1327 microseconds  
in order to point at  $x$ .