$$\mathbf{\dot{r}}_{ref}(t)$$

$$\begin{bmatrix}
\mathbf{\ddot{p}}(t_{cl} + \Delta T) \\
\mathbf{\ddot{p}}(t_{cl} + \Delta T) \\
\mathbf{\ddot{p}}(t_{cl} + \Delta T)
\end{bmatrix}$$