



$$\vec{J_B}/_0 = \left[ \frac{d}{dt} \vec{OB} \right]_0 = \dot{\lambda} \vec{z}_0 + \dot{\mu} \vec{x}_2 + \mu (\dot{\psi} \vec{z}_0 + \dot{\theta} \vec{y}_1) \wedge \vec{x}_2$$

$$\vec{V_B}/_0 = \dot{\lambda} \vec{z}_0 + \dot{\mu} \vec{x}_2 + \mu \dot{\psi} \cos \theta \vec{y}_1 - \mu \dot{\theta} \vec{z}_2$$

$$\vec{J_B}/_0 = \vec{V_B}/_0 + \vec{V_B} \epsilon_{2/0}$$

$$= \dot{\mu} \vec{x}_2 + \left[ \vec{V_A} \epsilon_{2/0} + \vec{BA} \wedge \vec{\Omega}_{2/0} \right]$$

$$\vec{V_B}/_0 = \dot{\mu} \vec{x}_2 + \dot{\lambda} \vec{z}_0 + (-\mu \vec{x}_2 \wedge (\dot{\psi} \vec{z}_0 + \dot{\theta} \vec{y}_1)).$$

$$\vec{F_B}/_0 = \left[ \frac{d}{dt} \vec{V_B}/_0 \right]_0$$