

$$\dot{E} = \dot{X}_{90} \sin(\alpha) - \dot{Y}_{90} \cos(\alpha)$$

$$\dot{N} = \dot{X}_{90} \cos(\alpha) + \dot{Y}_{90} \sin(\alpha) \quad (\text{Equations B33 - B35})$$

$$\dot{U} = \dot{Z}_{90}$$