Relative Motion

\[ x^A = x^B + x^{BA} \]

\[ \frac{d}{dt}(x^A) = \frac{d}{dt}(x^B) + \frac{d}{dt}(x^{BA}) \]

\[ \vec{v}^A = \vec{v}^B + \vec{v}_{BA} \]
\[ \vec{F}_A = \vec{r}_B + \vec{r}_{BA} \]

\[ \vec{v}_A = \vec{v}_B + \vec{v}_{BA} \]
- Aircraft has air speed of 500 km/hr.
- Pilot has course of 20° N of E (070°).
- Wind blows due West (270°) @ 80 km/hr.
- What is True course and speed (SOG)?
Lag LOS

Load LOS

Closing LOS

Over Load LOS

os

os

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