



1. Solve for t where $t > 0$

$$\|r + v * t\| = s * t$$

2. calculate aim point
 $\text{target_pos} + v * t$

3. desired heading is
Aim point – interceptor pos

Potential Issues

- Simulation Fidelity vs. Real Aerodynamics (wake turbulence, nonlinear aerodynamics)
- Sensor Assumptions vs. Operational Reality
- Target Behavior Modeling
- Actuator and Control Constraints Ignored or Idealized
- Transition Between Radar and Vision Guidance
- Environmental Effects Not Modeled (wind shear, gusts...)