

## عنوان مقاله:

A Terminal Vision-Based Guidance Law for an Anti -Helicopter UAV

## محل انتشار:

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## خلاصه مقاله:

In this paper a bank to turn guidance law for an Unmanned Aerial Vehicle (UAV) against low-speed targets such as helicopters is proposed. The UAV uses a strap-down camera to detect the target. The use of camera imposes constraints on selecting the guidance method and deriving required guidance law terms. Among the Bank-to-Turn (BTT) guidance laws, pursuit guidance with polar converting logic is utilized. It is assumed that the only onboard sensor is the camera. The projection of the target on the camera image plane is tracked and the line of sight rate is derived. This rate is then used as the input to the guidance law. Several intercept scenarios are considered between the 6-DOF UAV and the point mass helicopter models. The results show that successful intercepts can be obtained considering the camera and the UAV constraints and the limited field of view.

## کلمات کلیدی:

Vision-Based Guidance- Anti-Helicopter- UAV- Pursuit Guidance

## لینک ثابت مقاله در پایگاه سیویلیکا:

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