Research on Variable Thrust Directional Control Technique for Plateau Unmanned Aerial Vehicles

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Introduction

- More lift at low airspeed
- Weak maneuverability

High span chord ratio wings
Introduction

Thrust vectoring technique
Method

The proposed variable thrust mechanism

- Normal propeller engine
- 2 DoF servo platform
The proposed variable thrust mechanism
Method

The combinational flight control system
Implementation

Flight test in plateau region
Conclusion

- A novel variable thrust directional mechanism for propeller UAV
- Increased maneuverability
- Enhanced path tracking capability