



# A Survey of the Dynamics and Control of Aircraft During Aerial Refueling

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**Abstract:** Recent heightened interest in autonomous refueling of unmanned aerial vehicles has stimulated research activity in the area of aerial refueling in general. Aircraft aerial refueling research can be divided into four general areas: influence of tanker aircraft wake turbulence on the receiver aircraft, the dynamics of the drogue and hose, automatic flight control system design for aerial refueling, experiments and flight tests related to the practical implementation of autonomous aerial refueling system. This survey summarizes research activities as well as the current state of knowledge in these areas.

**Keywords:** *Aerial refueling; variable mass system; aircraft dynamics.*

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