

A COMPARISON OF TWO WAYS OF IMPROVING THE DIGITAL CONTROL OF  
REACTION WHEEL TORQUES

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ABSTRACT: This work presents a comparison of two ways of improving the digital control of reaction wheel torques. The first is a open loop one with a pulsed reference, and the second is a model following control one with velocity feedback. Such techniques differ by their mean and standard deviation torque values, improve that control significantly, but require more complicated electronics than usual. Simulation results are presented in both situations to show their differences.

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