

## عنوان مقاله:

Effect of a Pylon Mounted Cavity-Based Flameholder on the Combustor Flow Characteristics

## محل انتشار:

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## نویسندگان:

S. Nayal - Annasaheb Dange College of Engineering and Technology, Ashta - ۴۱۶۳۰۱, Maharashtra, India

D. Sahoo - Department of Aerospace Engineering, MIT School of Engineering, MIT ADT University, Pune - ۴۱۲۲۰۱, Maharashtra, India

## خلاصه مقاله:

This paper aims to study the effect of a pylon mounted cavity-based flameholder on the combustor flow characteristics. Computational analysis of two different models of flameholder configurations is performed. The novel cavity design ۱۱۰\_۹۰ has a fore-wall ramp angle of ۱۱۰ degrees and an aft-wall ramp angle of ۹۰ degrees and this design which shows a comparatively better combustor performance is adopted and mounted with a pylon. The flow features over the high performance base cavity ۱۱۰\_۹۰ is compared with the flow features obtained by adding a pylon on the upstream of the base cavity. The two cases are compared qualitatively as well as quantitatively based on the temperature distribution, pressure distribution, recirculation zones and drag experienced by the model. These compared parameters helped us to identify whether the mentioned combination is favorable and augments the flameholder performance.

## کلمات کلیدی:

Combustor performance, Supersonic flow, Flameholder, Cavity flow

## لینک ثابت مقاله در پایگاه سیویلیکا:

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