

An extended study into the comparison of the Carlin and Sonic burner

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Abstract:

Trials have been carried out to continue the study of the Sonic burner. The aim was to determine the repeatability of the Sonic burner and how a level of equivalency between the Carlin and Sonic burners can be achieved. Comparisons between the Carlin and Sonic burner in the form of calibration, temperature mapping and aluminium strip burn-through have been carried out.

The Sonic burner has undergone selected fuel pressure and air pressure configurations that stem from previous Sonic burner trials carried out at Resonate Testing and the FAA Tech Centre (led by Aeon Brown and Tim Salter).

Whilst undergoing comparable fuel and airflow configurations, the flame calibration and aluminium burn-through data can be directly compared.