

Experimental Study of Transition in a Turbine Rear Structure (in 8min)

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Turbine Rear Structure

 Mechanical link between the rear bearing and rear engine mount









OGV-LPT Test Facility

- Engine representative flow
- Reynolds number
- Inlet swirl angles
- Turbulence levels





Instrumentation

• Hotwire boundary layer (HW)

IR-thermography(transition by temperature variations)



Classical transition detection





Using IR-thermography







Temperature changes



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Full surface transition

- Full view
- Time resolved
- Separation

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