The Rough Wall High Reynolds Number Turbulent Boundary Layer Surface Pressure Spectrum

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Master of Science
in
Aerospace Engineering

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**Figure 4:** The Virginia Tech Stability Wind Tunnel (figure courtesy of AOE Department) shown with the full anechoic configuration, and its modification to the hemi-anechoic test section used for this investigation.

Figure adapted from facility website, courtesy of AOE department:
http://www.aoe.vt.edu/research/facilities/stabilitytunnel/description-stabilitytunnel.html
Figure also adapted from Figure 1 in:
and from Figure 2.2 in:

**Figure 7:** General test section configuration and coordinate system where the x, y, and z coordinates correspond to the streamwise, spanwise, and wall normal coordinate. The origin of which is located at the primary trip at the centerline and flush with the testing surface.

Figure adapted from Figure 2.7 in:
Written permission documentation for Figure 4:

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Dr. Devenport,

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- Stability Tunnel Schematic from:
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On Feb 20, 2014 2:14 PM, "Meyers, Tim" <meyerstw@vt.edu> wrote:
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May I have permission to use an adapted version of the following figures in my thesis?

- Figure 2.2: Schematic of Virginia Tech Stability Tunnel Anechoic test section with adjoining anechoic chambers. (Left) Typical anechoic test section setup (Right) Modifications made to accommodate false wall. Figure adapted from Devenport et al (2010) from Forest, J., 2012, “The Wall Pressure Spectrum of High Reynolds Number Rough-Wall Turbulent Boundary Layer”, M.S. Thesis, Aerospace and Ocean Engineering Department, Virginia Tech.


Thanks,
Tim Meyers