

2008 Summary of Research Reports

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Project: Rough-Wall Turbulent Boundary Layers: The Relationship between Surface Topography and Frictional Drag

Sponsor: ONR

Statement of Work:

The work over FY08 will be broken down into two phases. The first phase involves constructing rough wall test surfaces for large water tunnel experiments and obtaining surface topography maps. Next velocity profile data on the rough surfaces from will be acquired, obtaining roughness functions that span the hydraulically smooth to fully rough regime. This data will be used to develop correlations of drag over rough surfaces using statistical measures of the surface roughness.

Report: [Flack_MechanicalEngr_2008ResearchReport_ONR.pdf](#)