

Abstract Submitted
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Performance Results for the Optical Turbulence Reduction Cavity RYAN SCHMIT, CHRIS MCGAHA, JOHN TEKELL, JIM GROVE, MICHAEL STANEK, Air Force Research Laboratory — The testing of a new optical turbulence reduction cavity model from Mach 0.3 to 1.5 in the Trisonic Gasdynamics Facility (TGF) has occurred. The current model has optical quality fused silica windows that will allow non-intrusive flow field measure to be made. The results presented will compare the current optical turbulence reduction cavity model with the historic data from the old turbulence reduction cavity model that was built in the mid 1970s. Various flow control techniques to reduce the sound pressure level and overall sound pressure level inside the cavity were also exmanied and thier preformance results will be shown.

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