Abstract Submitted
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Geometric near-field characteristics of supersonic jets: Full and laboratory scales[1] JAZZ MYRES[2], SHANELL REYNOLDS[3], TRACIANNE NEILSEN[4], ALAN WALL[5], KENT GEE[6], Brigham Young University — Sound pressure measurements were made in the geometric near field of a full-scale jet installed on a military aircraft. In this work, levels at 11.7 m (near the 42-ft foul line) are reported. Weighting curves that account for listener factors are applied to the overall sound pressure level, including A-weighting, C-weighting, and D-weighting. In addition, the effect of representative double hearing protection on A-weighted overall level is shown.A useful limited comparison is made between a laboratory-scale, Mach-2.0, unheated jet and the full-scale jet engine at the same scaled distance from the jet centerline.

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[2]Undergraduate
[3]Undergraduate
[4]Adviser
[5]PhD Candidate
[6]Adviser

Jazz Myres
Brigham Young University

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