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WATER SUPPRESSION TEST ON JET NOISE

Abstract

Water spray suppresses generally on strong jet noise and takes effective measures on rocket and support system. Water spray validity test goes with easily qualitative analyzing and difficultly quantitative analyzing. For water suppression technology implements quickly, theory integration with scaled jet test is the best way about simulation and validation. The 2-Mach-Jet-Test has been to make advance for study on relationships between water spray parameters and water suppression effect. Test shows that jet SPL peak-values are close to 145dB under no water spray, while the investigation of wide scope of water spray flux shows that jet SPL peak-values are reduced. Now the drops of jet SPL peak-values are within the range of 5 12dB.