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**Wind tunnel tests on MiG-21M aircraft model with
combat flaps**

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15. Abstract

Tests have been conducted in the NAL 1.2m tunnel on a 1/17th scale model of the MiG-21M aircraft to study the effectiveness of trailing edge flaps as manoeuvre enhancing devices. Tests were conducted at Mach numbers of 0.5, 0.7 and 0.9. Schedules for deflection of flap and horizontal tail to give maximum trimmed L/D as a function of trimmed angle of attack are presented for the three Mach numbers and at two levels of static stability. The results indicate that increments of the order of 10% in trimmed lift at angles of attack of about 12 degrees are achievable through the use of appropriately scheduled flap and horizontal tail deflections.

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