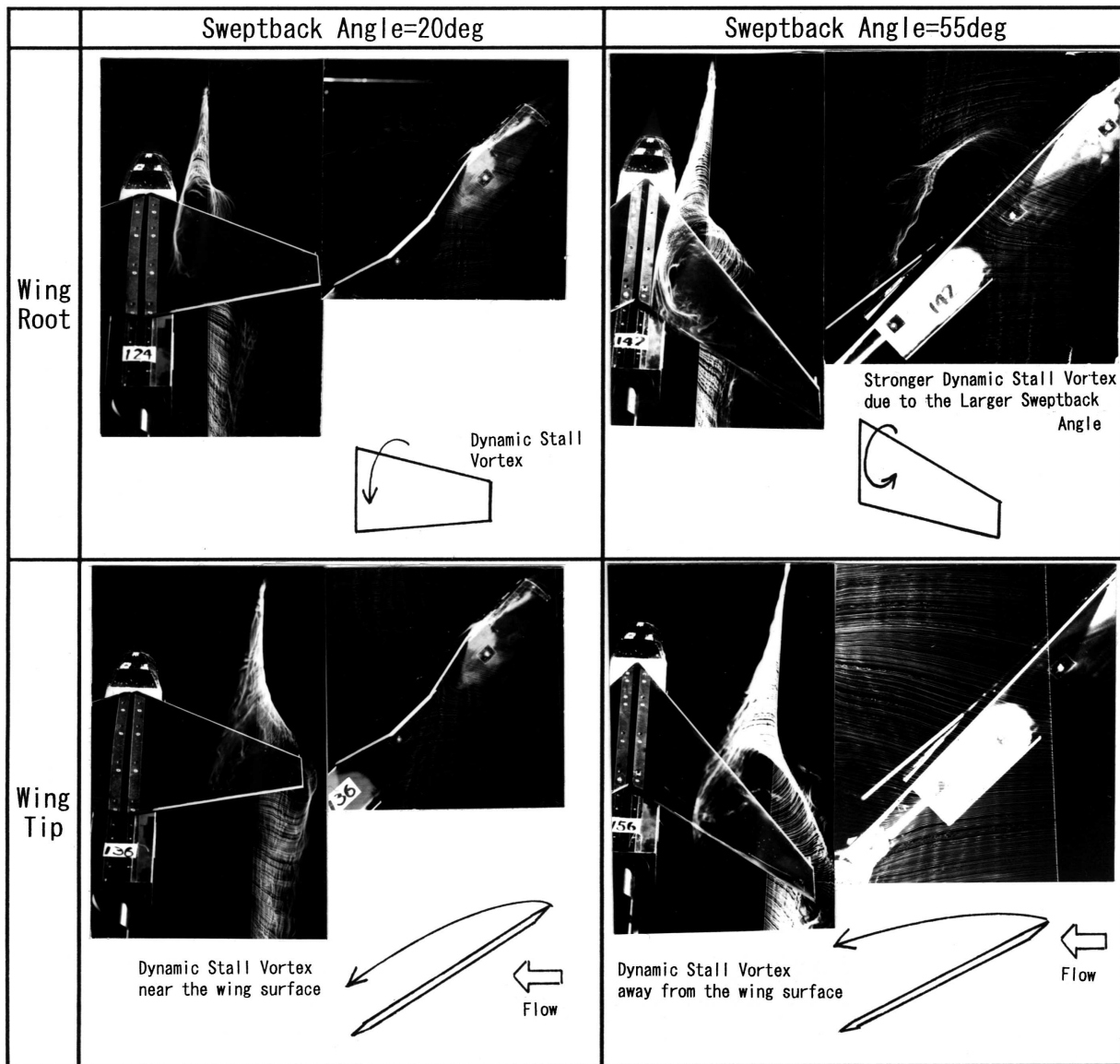


5. Smoke-wire Flow Visualization of the Dynamic Stall Vortex over the Basic Wing-body Model in Pitching Motion*

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Dynamic stall vortices formed over the basic wing-body model in pitching motion were visualized by the smoke-wire technique. The pictures were captured at the moment the model was at 40 deg angle of attack during the pitching-up motion from - 20 deg to 60 deg angle of attack. The uniform flow velocity was 10 m/s and the reduced pitch rate $k=0.025$. The leading edge sweptback angle was found to be of great effect on the strength and the location of the dynamic stall vortex, which results in the difference in the lift increment during the pitch-up motion measured by the internal balance.

* Hirano, H., Shimbo, Y., Ishiguro, M. and Taniguchi, M., Dynamic Lift Wind Tunnel Test of a 3-D Basic Configuration Model (Aerodynamic Force Measurement and Flow Visualization), Journal of Aeronautical and Space Science Japan, 48-561 (2000), 567-572