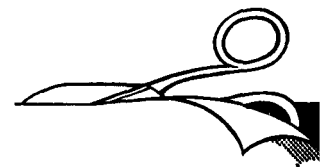


SUPPLEMENTARY PAPERS

The Non-members issue of this Journal contains the following Supplementary papers:

	<i>Page</i>	<i>Reprint price</i>
Problems of Undercarriage Design for V/STOL Aircraft — <i>S. W. H. Wood</i>	157–168	5s. 0d.
Buckling of Cylindrical Panels Under Lateral Pressure — <i>J. Singer</i>	169–172	3s. 0d.

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WOOD, S. W. H.

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The author has been responsible for the design of landing gear for seven separate V/STOL aircraft projects, four of which are now flying.

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SINGER, J.

Buckling of Cylindrical Panels Under Lateral Pressure

The stability of simply-supported cylindrical panels under lateral pressure is investigated by linear theory. First, panels with classical simple supports are analysed with the usual Donnell 8th order equation. Numerical results are presented which confirm that panels may buckle at lower pressures than corresponding complete cylindrical shells. Then the effect of circumferential restraint along the straight edges is studied by analysis of a panel with SS4 ($u=v=0$) boundary conditions and comparison with classical SS3 ($u=N_\phi=0$) supports.

The coupled Donnell equations are reduced to a set of algebraic equations and the eigenvalues are solved by an iterative technique. Circumferential restraint along the straight edges results in considerable stiffening under lateral pressure.

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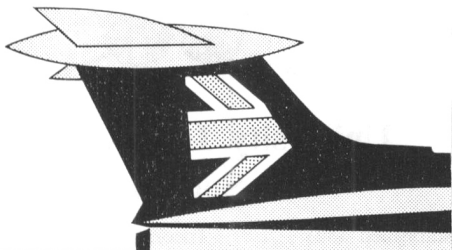
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