Errata

Elastic buckling design curves for isotropic rectangular plates with continuity or elastic edge restraint against rotation

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The following corrections have been made to this paper published originally in the April issue, volume 104, number 1034 of *The Aeronautical Journal* on pages 175 to 182.

The Greek letter lambda (λ) was missing from the caption of Fig. 1; which should read:

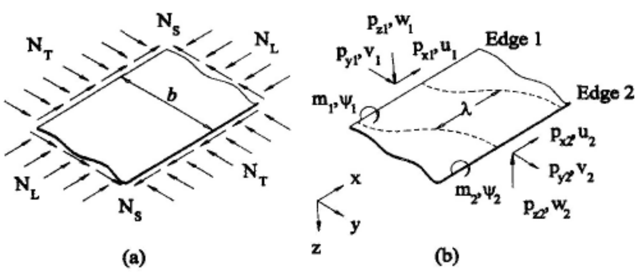


Figure 1. A component plate: (a) of width b with loading and reference axis system and; (b) showing skew nodal lines with half-wavelength λ caused by perturbation force (denoted by p and m) and displacement amplitudes shown at the longitudinal edges of the plate, which are multiplied by $\exp(^{i\pi x}/_{\lambda})$.

Two multiplication symbols contained within the following sentence should have been printed as follows:

4.0 MODELLING

The isotropic material properties are: Young's Modulus (E) = 72·4kNmm^{-2} (100,000lbin^{-2}) and Poisson's ratio (ν) = 0·3.

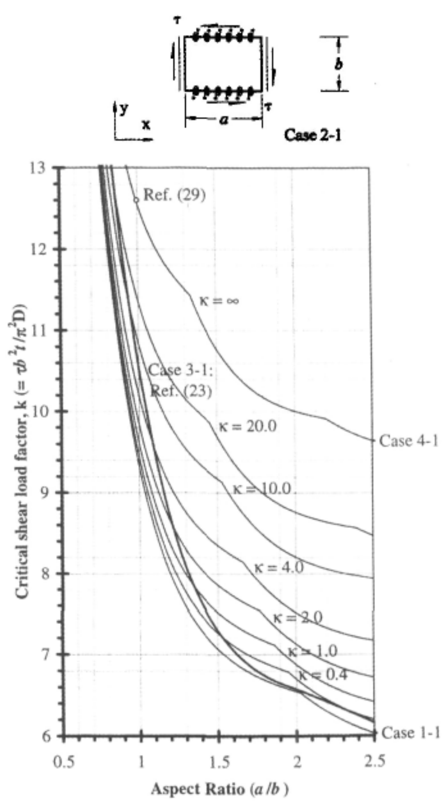
An S8R5 plate element is adopted for the finite element analysis[20] to provide the classical thin plate result. A high degree of convergence is achieved using 30 × 30 elements for the square plate ($^a/_b$ = 1·0) and maintained by adjusting the number of elements with respect to changes in aspect-ratio, e.g. 45 × 30 elements for $^a/_b$ = 1·5, etc.

The two equations contained in the paper should have appeared as follows:

$$\kappa = \frac{\beta b}{D} \qquad \ldots (1)$$

$$k = \frac{\sigma b^2 t}{\pi^2 D} \quad \text{or} \quad k = \frac{\tau b^2 t}{\pi^2 D} \qquad \ldots (2)$$

The correct fig. 4(c) now appears below containing the "Critical shear load factor" as intended by the author, illustrating design curves that should correspond to Case 2-1:



4(c) longitudinal edges, y = 0 and b, the two transverse edges simply supported. Case 4-1 results[29], for longitudinal edges clamped, and Case 3-1 results[23], which possess continuity over simple supports in the y-direction, are given for comparison.
Note that Case 4-1 ⇒ $k_{(a/b=\infty)}$ = 9·2;

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