where

$$A_\eta\phi_\eta(\xi) = R_\eta(\xi) + jI_\eta(\xi)$$

If the beam is subjected to an external force of the form $G_1(\xi)\cdot G_2(\theta)$, the response is then obtained as

$$\eta(\xi,\theta) = 2\sum_\eta^\infty R_\eta'(\xi)\int_0^\theta \exp-\nu_\eta(\theta-\tau)\cdot\cos(\omega_\eta(\theta-\tau))\cdot G_2(\tau)d\tau - I_\eta'(\xi)\int_0^\theta e^{-\nu_\eta(\theta-\tau)}\cdot\sin(\omega_\eta(\theta-\tau))\cdot G_2(\tau)d\tau \quad (14)$$

where

$$\frac{\phi_\eta(\xi)u_\eta}{Q_\eta} = R_\eta'(\xi) + jI_\eta'(\xi); \quad u_\eta = \int_0^1 G_1(\xi)\phi_\eta(\xi)d\xi$$

***Example***

An aircraft for the analysis of landing impact is idealized as in Fig. 1, where the wing is considered to be a beam, $M_1$ is the fuselage mass, $M_2$ and $M_3$ are the engine masses and $K$ and $C$ are landing gear stiffness and damping. This is a more realistic model as compared to the one treated by Stowell et al.[6] While writing Eq. (1) for this system $\xi_1$ is taken equal to $(0 + \epsilon)$.[1,2] The boundary conditions are $\phi'(0) = \phi'''(0) = \phi''(1) = \phi'''(1) = 0$, and the initial conditions are $\eta_0(\xi) = 0$, $g_0(\xi) = V_0$, the dimensionless velocity of descent.

The frequency equation was solved by Newton-Raphson method, and the frequencies for a particular case are shown in Fig. 2. Fuselage motion following landing are plotted in Fig. 3 for different positions of the engine mass. The relation of this response with that of the corresponding ragid body system is a measure of the effect of interaction of wing flexibility with the landing gear forces.

## References

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# Errata

## Analytical Method for Combining the Interaction of Inlet Distortion and Turbulence

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FIGURE 3 displaying dynamic airfoil data from the experiments of Carta is incorrectly labeled. The upper curve is for high frequency $\omega c/V = 0.60$ and the lower curve is for low frequency $\omega c/V = 0.15$. The author is grateful to one of the reviewers for pointing out this error before publication and to F. O. Carta for pointing it out after publication.

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## Graded Thermal Barrier—A New Approach for Turbine Engine Cooling

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IN Table 1, Median Test Results, of the original paper, the entry for graded coating-0.030 Ni-Cr-Mo/$ZrO_2$ should have a 100+ in the column for Burner Liner Thermal Shock. This specimen did not fail in 100 shocks.

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