

The 1982 International Issue

THE concept of an International Issue of the *Journal of Aircraft* was introduced by Dr. Allen Fuhs while he was the Editor-In-Chief of this journal. The basic idea was to provide an annual opportunity to convey to journal readers the rich variety of technical activity underway in many countries. The first International Issue was published in 1980. Based on reader interest we prepared an International Issue in 1981. This third compilation represents a broad range of activity in several countries from industry, university, and government centers.

From West Germany comes an article on active flutter suppression on an F-4F aircraft. This paper represents a cooperative program between the MBB GmbH Airplane Division and the USAF AFWAL Flight Dynamics Laboratory. Two papers from Canada appear in this year's issue. From National Defence Headquarters we present an article on effects of increased jet fuel freeze point on cold start ability using an Allison T63-A-700 turboshaft helicopter engine. The second article from Canada describes a novel experimental study of thrust produced by an oscillating rectangular wing. Three papers from the Netherlands National Aerospace Laboratory appear in this issue. From NLR a paper which complements the Canadian wind shear paper is presented. This one develops a non-Gaussian atmospheric turbulence model for flight simulation research. Combined effects of intermittency and patchiness are included. Another NLR offering describes an improved potential gradient method to calculate airloads on oscillating supersonic interfering surfaces. Theoretical and experimental results are included. The third paper from NAL describes a wind tunnel study of the flutter characteristics of a 3-D supercritical wing.

A paper from Volvo Flygmotor of Sweden presents studies of an advanced conceptual turbine engine. Technologies involved include boron aluminum fan blades, two-stage flash-vaporizing combustor, and full authority electronic control. A paper from the National Aerospace Laboratory, Japan, details the effects of side fences on powered lift augmentation for upper surface blowing configurations. Another Japanese submittal treats the behavior of sailing airfoils accounting for elasticity. The final article is from Australia and details a design process for fully laminar airfoil sections.

In addition to the articles there appear several Engineering Notes. The first, from England, treats the effect of downwash on the induced drag of canard wing combinations. Although the case for infinite stagger is addressed, an induced thrust component is derived. The second EN, also from the UK, argues that aircraft pitch attitude should receive stronger emphasis as a performance parameter, especially for transport aircraft. A final UK Note derives and implements the added mass tensor for a rigid axisymmetric parachute application to arrive at the effects of added mass on its dynamic stability.

Note on the masthead (opposite) the International Board of Editors. Each of these individuals (all AIAA members) has been invited to serve as a point of contact for authors in his country. These Editors have also actively sought contributions to the International Issue. Such contributions often provide excellent insight into activity underway in the author's country. Please observe that all submittals for this issue undergo the same rigorous review as all other manuscripts. The efforts of these International Editors are very much appreciated.

With your continued interest in the International Issue as an annual forum to report on the activities of the world community of aircraft technologists, we'll look forward together to the 1983 update.

Thomas M. Weeks
Editor-in-Chief