



## Unsteady Transonic Flow (Paperback)

By Marten T. Landahl

CAMBRIDGE UNIVERSITY PRESS, United Kingdom, 2009.

Paperback. Book Condition: New. Reprint. 224 x 152 mm.

Language: English . Brand New Book \*\*\*\*\* Print on Demand

\*\*\*\*\*. First published in 1961 this monograph deals with the analysis of unsteady lift distributions of thin oscillating wings at transonic speeds. Such distributions are needed for the prediction of flutter, which tends to occur more frequently at speeds near that of sound than in any other speed regime. This book emphasises analytical methods that treat the linearised problem for simple wing planforms such as rectangular and delta wings. There is a thorough discussion of the limitations of the validity of linearised theory as well as the proper boundary conditions to be applied for the case of flows with shocks. Although the standard approach in engineering practice is to sense transonic flow calculations with the aid of direct numerical simulations on a high-speed computer, the treatment in this classic monograph is still of value in the physical insight it provides and in the reference exact solutions it supplies for simplified cases that may serve as validation cases for complicated computer codes. This classic work will be of interest to aerodynamicists, fluid dynamicists and applied mathematicians.



**READ ONLINE**

[ 4.09 MB ]

### Reviews

*This book is definitely not straightforward to get started on studying but extremely exciting to read. It is really simplistic but shocks in the 50 percent of the ebook. Once you begin to read the book, it is extremely difficult to leave it before concluding.*

-- **Ally Reichel**

*This publication is amazing. It is definitely basic but shocks in the fifty percent of your publication. You wont feel monotony at anytime of your own time (that's what catalogues are for concerning if you question me).*

-- **Prof. Kirk Cruickshank DDS**