

$$\dot{x} = f(x, u), \quad x(0) = x_0$$

$$y = g(x, u)$$

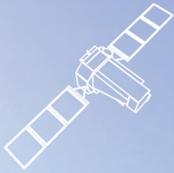
$$sX(s) = (A - N)X(s) + U(s)$$

$$Y(s) = CX(s) + DU(s)$$

$$\dot{\Phi}(t, t_0) = A(t)\Phi(t, t_0)$$

Incremental Control and Allocation for Power-Optimal Flight of Transition Aircraft

Ole Pfeifle, M.Sc.



$$\dot{v} = \frac{1}{m} (R_A + R_F) + T_{fg} \cdot \begin{pmatrix} 0 \\ 0 \\ g \end{pmatrix} - (\tilde{\omega} + \tilde{\omega}_E) \cdot v$$

$$x^T P x < 0$$



$$\beta_{nc} \equiv \frac{1}{N} \sum_{-1}^N \beta_m \cos n\psi_m$$

```

i=0; i<=N-1; i++)
    if (xD[1+i] >= sat_val) {comp
    if (xD[1+N+i] >= sat_val)
    if (xD[1+2*N+i] >= sat_val
    if (xD[1+4*N+i] >= sat_val

```

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$$\|y\|_{rms}^2 \leq \sup_{\omega \in \mathbb{R}} |G(j\omega)|^2 \frac{1}{2\pi} \int_{-\infty}^{\infty} S_{uu}(\omega) d\omega$$

Incremental Control and Allocation for Power-Optimal Flight of Transition Aircraft

A thesis accepted by the Faculty of Aerospace Engineering and Geodesy
of the University of Stuttgart in fulfillment of the requirements
for the degree of Doctor of Engineering Sciences (Dr.-Ing.)

by

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Co-referee: Prof. Dr.-Ing. Flavio Silvestre
Date of defense: December 4, 2023

**Institute of Flight Mechanics and Controls
University of Stuttgart**

2024

Fortschrittsberichte des Instituts für Flugmechanik und
Flugregelung

Band 18

Ole Pfeifle

**Incremental Control and Allocation for
Power-Optimal Flight of Transition Aircraft**

D 93 (Diss. Universität Stuttgart)

Shaker Verlag
Düren 2024

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at <http://dnb.d-nb.de>.

Zugl.: Stuttgart, Univ., Diss., 2023

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Printed in Germany.

ISBN 978-3-8440-9496-1

ISSN 2199-3483

Shaker Verlag GmbH • Am Langen Graben 15a • 52353 Düren

Phone: 0049/2421/99011-0 • Telefax: 0049/2421/99011-9

Internet: www.shaker.de • e-mail: info@shaker.de

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