

AIAA Flight Testing Conference 2015

Held at the AIAA Aviation Forum 2015

**Dallas, Texas, USA
22-26 June 2015**

ISBN: 978-1-5108-0829-4

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

The contents of this work are copyrighted and additional reproduction in whole or in part are expressly prohibited without the prior written permission of the Publisher or copyright holder. The resale of the entire proceeding as received from CURRAN is permitted.

For reprint permission, please contact AIAA's Business Manager, Technical Papers. Contact by phone at 703-264-7500; fax at 703-264-7551 or by mail at 1801 Alexander Bell Drive, Reston, VA 20191, USA.

TABLE OF CONTENTS

FLIGHT TEST

A Framework for Applying the OODA Loop to Mission Control Room Execution (AIAA 2015-3223)	1
<i>Jeffrey M. Newcamp</i>	
Current Hypersonic and Space Vehicle Flight Test Instrumentation (AIAA 2015-3224)	8
<i>John J. Spravka, Timothy R. Jorris</i>	
Stall/Spin Flight Test Techniques with COTS Model Aircraft and Flight Data Systems (AIAA 2015-3225)	23
<i>Roberto Bunge, Felipe Munera Savino, Ilan Kroo</i>	
Ground Minimum Control Speed (VMCG) Testing of Transport Aircraft (AIAA 2015-3226)	43
<i>Paul J. Bolds-Moorehead, Van Chaney, Terry Lutz, Stephane Vaux</i>	
Lateral-Directional Aerodynamic Model Identification of a Single-Engine Propeller Aircraft Using Partial Orthogonal Least Squares (AIAA 2015-3227)	69
<i>Joao Vitor Zanette, Fabio Almeida</i>	

OPTIMIZATION TECHNIQUES IN FLIGHT TESTING/GROUND TEST

Optimized Calculation of Forces for Fullscale Aircraft Structure Fatigue Testing (AIAA 2015-3346)	88
<i>Chongwu He</i>	
The Design and Test Result of Pressure Distortion Compensation Device in Weight and Balance System (AIAA 2015-3347)	93
<i>Minqiang Yao, Yue Chang, XiaoGang Xuan</i>	
Evaluation of Low-Cost Autopilots for SUAS Operations (AIAA 2015-3348)	103
<i>Jamey D. Jacob, Calvin T. Brown</i>	
Application of a Small UAV Fleet for Demonstration of Optimized Missions (AIAA 2015-3349)	127
<i>Marcin Kasprzyk, Przemyslaw Bibik, Marek Malinowski, Jakub Polaczek, Kacper Wronowski</i>	
Author Index	