Design Engineering

Papers Presented at the AIAA Aviation Forum 2020

Online 15 – 19 June 2020

ISBN: 978-1-7138-1723-9

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 34922 Uwptkug'Xcmg{ 'F tkxg.'Uwkg'422, Reston, VA 20191, USA.

TABLE OF CONTENTS

INNOVATIVE AND CONCEPTUAL DESIGNS IN AVIATION

PRESSURE MAINTENANCE OF HIGH-ALTITUDE INFLATABLE KITE SYSTEMS
CONCEPTUAL DESIGN OF FUELING MECHANISM FOR AN UNMANNED AERIAL VEHICLE WITH HARVESTING LIQUID-METHANE CAPABILITY ON TITAN
DANDELION-INSPIRED MICRO-ROVERS: NOVEL CONCEPT OF EXTRATERRESTRIAL SYSTEMS FOR MARS EXPLORATION

EMERGING DESIGN APPROACHES AND DESIGN EDUCATION IN AVIATION

IMPROVING UNDERGRADUATE AEROSPACE ENGINEER PROFESSIONAL READINESS	
THROUGH BOEING 737 MAX CRASH CASE STUDY	. 59
Muwanika Jdiobe, Kyle Hickman, James A. Kidd, Nicoletta Fala	

Author Index