

Communications Systems

Papers Presented at the AIAA SciTech Forum and Exposition
2025

Orlando, Florida, USA
6-10 January 2025

ISBN: 979-8-3313-1848-2

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 Uvptkug'Xcmg{'Ftkxg.'Uwkg'422, Reston, VA 20191, USA.

TABLE OF CONTENTS

COMMUNICATION SYSTEMS

Space Network (SpaceNet) Testbed - Development of a Multi-Functional Testbed for Simulating Space Communication Networks	1
<i>John S. Downs, Bruce Barbour, Alexander Kedrowitsch, Deven Mhadgut, Suryansh Aryan, Samantha P. Kenyon</i>	

A Review of Non-Terrestrial Network Standard Development in 3GPP RAN and Future Directions for 6G	19
<i>Xin Tong, Zhanyuan Xie, Yi Gu</i>	

Demonstrating and Analyzing the Effects of Dynamic Contact Graphs in Improving Wireless Adhoc Delay Tolerant Networks through a Simulated Stratospheric Testbed	29
<i>Ali Mosallaei, Daniil Voloshin, James W. Cutler</i>	

VHF Reconfigurable Intelligent Surfaces for Meteor Burst Communication	45
<i>Rajiv Thummala, Gregory Falco</i>	

Author Index