

HIGH FRONTIER

The Journal for Space and Cyberspace Professionals

November 2010

Volume 7, Number 1

Headquarters
**Air Force
Space Command**
Peterson Air Force Base, Colorado

Commander

General C. Robert Kehler

Vice Commander

Maj Gen Michael J. Basla

Director of Public Affairs

Col Dewey Ford

Creative Editor

Ms. Nadine Sage

High Frontier Staff

Mr. Steve Tindell

Dr. Rick Sturdevant

Maj Catherine Barrington

Maj Bradley Brewington

Maj Vanessa Hillman

Maj April Wimmer

Mr. Gregory V. Williams



Published by a private firm in no way connected with the US Air Force, under exclusive written contract with Air Force Space Command. This command funded Air Force journal is an authorized publication for members of the United States military Services. The views and opinions expressed in this journal are those of the authors alone and do not necessarily reflect those of the United States Department of Defense, the United States Air Force, or any other government agency.

Editorial content is edited, prepared, and provided by the *High Frontier* staff. All photographs are Air Force photographs unless otherwise indicated.

High Frontier, Air Force Space Command's space professional journal, is published quarterly. The journal provides a scholarly forum for professionals to exchange knowledge and ideas on space-related issues throughout the space community. The journal focuses primarily on Air Force and Department of Defense space programs; however, the *High Frontier* staff welcomes submissions from within the space community. Comments, inquiries, and article submissions should be sent to AFSPC.PAI@peterson.af.mil. They can also be mailed to:

AFSPC/PA
150 Vandenberg St. Ste 1105
Peterson AFB, CO 80914
Telephone: (719) 554-3731
Fax: (719) 554-6013

For more information on space professional development please visit:
<http://www.afspc.af.mil>

To subscribe:
Hard copy: nsage@sgis.com
Digital copy: <http://www.af.mil/subscribe>

Contents

Introduction

General C. Robert Kehler 2

Senior Leader Perspective

Schriever 2010, A Political Perspective

Hon. Thomas M. Davis 3

The Complexities of America's National Security:

Enabling A New Generation of Leadership

Hon. George W. Foresman 5

The Challenge of Integration:

Lessons from Schriever Wargame 2010

Lt Gen Larry D. James 9

Schriever Wargame 2010:

Thoughts on Deterrence in the Non-Kinetic Domain

Maj Gen Susan J. Helms 12

Schriever Wargame 2010 – A Coming of Age

Brig Gen Robert J. Chekan 16

Schriever – An Australian Perspective

Air Cdre Andrew Dowse 19

Beyond Schriever Wargame 2010

Brig Gen Perry Matte 22

Flight Suits and Sport Coats:

The Role of Industry in Military Space Operations

Air Cdre Mark L. Roberts 26

Effects Felt Around the World: The Growing Complexities of the Interaction

Between Geographic and Functional Combatant Commanders

Brig Gen Terrence J. O'Shaughnessy, et al 30

National Security Fundamentals in the Space and Cyber Domains

Ambassador Lincoln P. Bloomfield, Jr. 34

Schriever Wargame 2010

Science Supporting Space and Cyber:

Insights From Schriever Wargame 2010

Dr. Werner J. A. Dahm and Col Eric Silkowski 38

The Schriever Challenge – Keep the Walls Down

Maj Sam Baxter and Capt Nicole O'Neal 41

Industry Perspective

A Comprehensive Approach to Space and Cyberspace Operations

Mr. Marc J. Berkowitz 44

When the Future Dries Up

Dr. Steven M. Huybrechts 48

Book Review

National Security Space Strategy Considerations

Dr. Rick W. Sturdevant 54

Next Issue: *Implications of the New National Space Policy*

Cover: Schriever Wargame 2010: US, Australia, Canada, and United Kingdom. Cover designed by Daniel Santistevan.
Back Cover: Blue binary code, digital background, psdGraphics.