

A photograph of Earth from space, showing the curvature of the planet and the thin blue atmosphere. The sun is visible on the horizon, creating a bright glow and illuminating the clouds. The background is the deep blue of space.

# High Altitude & Near Space (HAaNS) Conference

## Panel III: The Road Ahead

October 21, 2009

# The Road This Far

## The Need Identified:

- Constant Air and Maritime Awareness
- 24/7 Over-the-Horizon C4ISR
- Disaster Support
- “Relieve the burden of the Warfighter”
- Complete a persistent Joint Airborne Layer Network Concept
- Bridge the domain between air and space
- Fill the shortfalls
- Provide surge capabilities
- Re-constitute capabilities
- Communications
- Expand, extend the network

# The Road This Far

## The HAaNS Advantages:

- Large footprint coverage
- Extended LOS ranges
- Persistent coverage
- Higher resolution/smaller optics
- Lower total costs
- Mobile
- Re-Taskable
- Geo-stationary
- Long Loiter
- Over-the-Horizon
- Responsive
- Survivable
- Less in-theater infrastructure
- Reallocation of UAVs

Maj Gen Stutzreim,  
USNORTHCOM

Brig Gen Story, USA  
SMDC

Mr. Bo Marlin,  
HQ USAF

# The Road This Far

## The HAaNS Challenges:

- “Need for leadership in this dynamic area”
- “Urgency for HAaNS capabilities”
- “Deliver a multi-domain solution”
- “Need a successful Demonstration”
- Government, “Industry needs to develop these capabilities.”
- Industry, “Government needs to invest in these capabilities.”
- To date: Limited success
- Today: Technology is available

So what is the Road Ahead?

# Panel Objectives

1. Look at the total market for High Altitude and Near Space, both domestic and international
2. Hear from experts on their vision of what lies ahead for High Altitude and Near Space
3. Build the Road Ahead by addressing the need for leadership, an organization and proof that High Altitude and Near Space is ready now

You can be a pioneer that shapes this industry

# Panel Members

- Mr. Ed Herlik, Market Intel Group
- Dr. Ed Tomme, Cyber Operations Consulting
- Capt William Cain (USN Ret), Colorado Technical University
- Mr. David Carrithers, SMDC
- Capt David MacKay, Virgin Galactic

# Leadership

- RMTA Mentorship
- Tri-state, Tri-organizational Senior Advisory Group (State EDCs, State Universities and Industry Partners)
  - Identify and charter a non-profit HAaNS organization
  - Raise funds for the organization and the project
  - Approve the project

# Organization

- RMTA
- Senior Advisory Group
- Project Working Group
- HAaNS Non-profit Organization

# HAaNS Project Candidates

- Demonstrate launch of a 8-10 kg satellite into LEO from 100K ft, LTA launch platform
- Demonstrate a persistent stratospheric surveillance, communications and networking capability
- Demonstrate the employment of bi-static GMTI, AMTI radar from a LTA platform operating in the stratosphere
- Demonstrate environmental data collection over the poles from an LTA stratospheric platform
- Demonstrate the ability to provide wide-area broadband capability for developing nations from the stratosphere