

Space Policy Issues

- Space Threats -

14 June, 2010

Fundamental Space Threats-1

- **World Has Not Yet Experienced a Full-Out Space War**
- **Difficult to Assess What the Likely Conditions, Battlefield Tempo, Strategies & Tactics Would Underlay a Future Space Conflict**

Space Warfare Future is Unknown

Fundamental Space Threats-2

- **Despite Best Efforts at INTEL Collection, Many Historical Examples of Surprise Attack**
 - **Pearl Harbor**
 - **Battle of the Bulge (in Spite of 11,000 Ultra Message Decryptions Indicating Buildup of Major German Forces for Attack)**
 - **Yalu River in Korea**
 - **Most Israeli-Arab Conflicts**
- **Due to the Distances Involved in Space & Unmanned Nature of the Environment, Surprise Attacks in Space Can Only be Even More Difficult to Detect**

Surprise Attacks In Space Will Occur

The Value of Surprise

- **National Defense University Study:**
 - **Analysis of 16 Major Conflicts in 20th Century**
 - **138 Cases of Surprise Attacks Assessed**

- **Study Results**
 - **Without Surprise - 1 : 1.7 Casualty Ratio**
 - **With Surprise - 1 : 14.5 Casualty Ratio**

Fundamental Space Threats-3

- **Many New Weapon Technologies Provided Considerable Advantages to Their First User**
 - **Catapult vs. Greek Fortifications**
 - **Cannon vs. Castle Walls**
 - **Crossbow vs. Shield**
 - **Musket vs. Body Armor**
 - **Tank vs. Machine Gun**
 - **Shaped-Charge vs. Bunker**
 - **Airplane vs. Battleship**
- **More Than Likely the Side That First Employs Offensive Weapons Against Space Systems Will “Win” the Space War, & Unbalance a Country’s Use of Space Systems to Support the Terrestrial Battlefield, at Least Over the Short Duration of Any Probable Future Major Conflict.**

Side That Attacks First In Space Will Win???