# **Space Policy Issues**

- Space Principles of War -

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# **Principles of War**

- Objective
- Offensive
- Mass
- Economy of Force
- Maneuver
- Unity of Command
- Security
- Surprise
- Simplicity

**Principles of War Equally Applicable to Space & Terrestrial Warfare** 

## **Space Principles of War (1)**

### Objective

- ➤ **Terrestrial:** "Direct every military operation toward a clearly defined, decisive, and attainable objective with measurable effects"
- ➤ **Space:** Are your objectives to take out a satellite or a system capability that may be supported by both satellites and ground systems. Will taking out the satellite be decisive in denying that category of information. Does it have a measurable impact on the battlefield. Which military objectives does this system support. Is satisfaction of this objective achievable. Are there branches and sequels to space control operations plans if they fail <u>or</u> if they are successful.

# **Space Principles of War (2)**

#### Offensive

- > Terrestrial: "Seize, retain, and exploit the initiative"
- ➤ **Space:** Is there political will to start a space war at the beginning of conflict and seize the space initiative, or is taking out ground sites supporting space sufficient to achieve objectives. Are we setting the time, place and terms of the space battle. Does the battle tempo include space attacks on a continuing basis to keep the adversary off-balance. Can space weapons sustain continuous attacks. Is there a pre-approved ramp-up of space attack severity to exploit successes for further gain.

# **Space Principles of War (3)**

#### Mass

- ➤ **Terrestrial:** "Mass the effects of overwhelming combat power at the decisive place and time"
- ➤ **Space:** Are there sufficient weapons to achieve <u>continuous</u>, or sustained space control. Can the adversary re-configure to avoid attack. Are the space weapons overwhelming to the military function they are trying to deny. Is there political will to implement massed space attack. Can space weapons get into position at the decisive place and time. Do we know the decisive place and time for space weapons application. Can space weapons be synchronized for employment simultaneously.

**Space Strategy Planning Has Not Had the Benefit of a Long History** 

## **Space Principles of War (4)**

#### Economy of Force

- ➤ **Terrestrial:** "Employ all combat power available in the most effective way possible; allocate minimum essential combat power to secondary efforts"
- ➤ **Space:** Are all space control efforts and weapon systems integrated into one deployment/employment plan. Is the target list optimal with minimal weapons use. Are different phenomenology weapons use integrated. Are the results of space control decisive to the battlefield. Are all space control systems employed purposefully at all times of the conflict, even in delay, limited or deceptive kinds of attack that focus the adversary's attention away from the main space attack.

# **Space Principles of War (5)**

#### Maneuver

- ➤ Terrestrial: "Place the enemy in a position of disadvantage through the flexible application of combat power"
- Space: Have space weapons been deployed in optimal positions and time-space phasing. What is the effect on the adversary of weapons use. Has the "high ground" of space above the battlefield been won. Are there critical orbits/time phasing/launch corridors/communications paths around the world contributing to the battlefield that need space superiority consideration. Has access to space been denied to the adversary & its allies, and optimized for blue side & allies. Has blue freedom of action been maximized while minimizing red freedom of action in space. Are points of application of space control weapons constantly shifted to confuse adversary response, and avoid predictable patterns of operation, for survivability reasons.

# **Space Principles of War (6)**

#### Unity of Command

- ➤ **Terrestrial:** "For every objective, seek unity of command and unity of effort"
- ➤ Space: Have space control, info war, and air/ground attack plans been integrated with each other and with intelligence collection requirements. Does the "classic" target allocation process give sufficient consideration of space/info targets. Is there adequate space/info war delineation of chain of command and decision responsibility. Are space target lists traceable back to objectives (both red and blue). Do blue and red commanders appreciate the importance of space to their conduct of the war.

## **Space Principles of War (7)**

### Security

- ➤ **Terrestrial:** "Never permit the enemy to acquire unexpected advantage"
- ➤ **Space:** Are space forces, including weapon systems, survivable in the battlefield environment. Have OPSEC and fratricide concerns been met. Have blue space choke points (orbits/time phasing/launch corridors/communications paths), centers of gravity (TT&C and launch sites), logistics, and command structures been identified and protected. Does blue have alternative space-related sensor, processing, command, and communications paths. Are red space strategy, tactics, doctrine, organization, and intentions assessed.

## **Space Principles of War (8)**

### Surprise

- ➤ **Terrestrial:** "Strike the enemy at a time or place or in a manner for which he is unprepared"
- ➤ **Space:** Are space control weapons existence known to an adversary, or does he know they have been deployed to the theater, or do they have war operating modes to surprise the enemy by their use. Are there a series of surprise space control weapons that can be alternated in use to maintain cover. Is the use of these weapons detectable or attributable to a specific country by an adversary. Timing and tempo of space weapon use can surprise also, even if their existence is known. Threat of weapon use, even if does not exist, can effectively surprise.

## **Space Principles of War (9)**

### Simplicity

- ➤ **Terrestrial:** "Prepare clear, uncomplicated plans and concise orders to ensure thorough understanding"
- ➤ **Space:** How complex are space weapons, and are the effects of their use easily understandable by non-space blue and <u>red</u> commanders (do they know they've been hurt bad). Are there branches and sequels to space control operations if they fail <u>or</u> if they are successful.

# Other Considerations (1)

- Combined Arms
  - >Space vs Terrestrial Attack
  - **≻Delay vs Kill Effects**
  - > Deterrence vs Employment
  - >Covert vs Overt Weapons
- Balance
  - **≻**Offense vs Defense

# Other Considerations (2)

- Political Sensitivity
  - > Laws of Armed Conflict
  - > Space Treaties
  - > Public Perception
- Rules of Engagement
- Space Includes Both Position (Orbits) and <u>Time</u> - Impacts Attack Tempo
- Space Attack Phase of Conflict
  - ➤ Would space attack in the pre-conflict phase deter the start of the conflict

## **Gradations of Space Control**

- ① Deter
  - Pre-Conflict
  - Trans-Conflict
- ② Deceive
- 3 Deny
- **4** Disrupt
- **Degrade**
- **© Destroy**

## **Space Conflict Levels**

- Peacetime
- 2 Crisis
- **3** Covert Military Actions
- **4** Overt Military Actions
- **Solution** Seconstitution