



# The Chinese People's Liberation Army and Space Warfare

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# China: Five Years and Beyond in Space

- Space is the “focal point for advanced Science and Technology”
- Drives economic development and military power
- Outer Space is the “top of the food chain” in warfare – The High Ground
- Winning in space is key to the future

# Future Commercial Programs

- Earth Observation Services
  - Met
  - Ocean
  - Resources
  - Environmental
- Space Launch Services
- Communications
- Ground equipment/Stations
- Geo-Stationary and Near Earth

# The PLA's Approach to Warfare

- Five Domains of War are integrated
  - Land
  - Sea (Undersea)
  - Air
  - Electromagnetic Spectrum / Information
  - Space (high ground – must capture)

# Key Issues for the People's Liberation Army

- Sovereignty in space
- Offensive and Defensive activities in space
- How space supremacy relates to information warfare
- Military use of civilian satellites
- How to apply the Laws of War

## Sovereignty Debate

- How high is territorial airspace?
- What activities are permitted?
- Military reconnaissance = “Battlefield Preparation”
- Global strike and outer space
- Foreign observation of China

## The Laws of War Apply

- Use of civilian space craft by a belligerent power means attack is OK
- Common space like common seas and skies
- Space craft, satellites, stations, etc. of a belligerent are acceptable targets in war anywhere in common space

# Space Warfare Programs

- Direct ascent KKV
- Laser Blinding
- Jamming
- Microsat/Parasite - Jam or Collide
- MMW
- Upper atmosphere fighter (up or down)

## Space Warfare Programs (Cont)

- Space Deterrence
- Aircraft as launch platform
- Space-to-ground attack
- CNA on space control

# Conclusions

- In the event of conflict with the PLA, we can expect to see military operations carried out across all the domains of war, including space, and the electromagnetic spectrum (or information and cyber-warfare).
- Any military operations in space will be part of a more coordinated cyber or information attack on an enemy's knowledge and command systems.
- There will probably be strategic warning, even if there is operational or tactical surprise. The PLA and the CMC will likely justify any of its actions in advance by conducting what it calls "legal warfare."
- The PLA will seek to exercise "space control" in a limited area of conflict.
- The PLA will observe the internationally accepted definitions of "commons" in space (over 100,000 meters or 120 miles) in peacetime and periods of tension.
- If conflict breaks out, altitude limits on space control are off. Any systems carrying adversary military traffic or signals will be fair game for the PLA.
- The PRC Foreign Ministry, the security services, CCP liaison department, and the PLA will likely exploit political divisions in the U.S. over nuclear testing and space-based weapon systems by applying the concept of "legal warfare."

# Chinese Intelligence and Security Services or Collectors

- Ministry of State Security
- Local and regional security bureaus
- Ministry of Public Security
- PLA Second Department (Intel)
- PLA Third Department (EW/SIGINT)
- PLA Fourth Department (IW)
- General Armaments Department

## Intel Services/Collectors (cont.)

- General Logistics Department
- Commission of Science, Technology and Industry for National Defense
- General Political Department (Liaison Department)
- Communist Party Liaison Department
- Industries/State Companies and their reps