

## General Studies-2; Topic: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

### Space Weaponization Programme

#### 1) Introduction

- The U.S. President Donald Trump had announced the creation of a “space force” or a sixth branch of the American armed forces.
- The imperative by America to build space weapons is nothing new.
- It goes back to the Cold War, an example being the Strategic Defense Initiative of the Reagan Administration.

#### 2) Intention

- The creation of the new force represents an important shift at least at an institutional level.
- The advantages it will bring to American war-fighting capabilities are still unclear.
- The push for the creation of a space corps is to deny the Russians and the Chinese advantages in space.
- The intention is to see that the U.S. establishes and maintains dominance in space.
- There is exponential growth in China's space military capabilities over the last two decades.
- Space weapons have one principal function — deterrence.

#### 3) Reaction

- The U.S. Air Force is not entirely enthusiastic about this new service.
- Objections have also emerged from within the Trump Administration.
- Adding another military arm would only compound the organisational challenges facing the U.S. armed services.
- China said it opposes the weaponization of space.
- Russia may probably align with China to not to allow U.S. space dominance.

#### 4) Implications

- It could undercut ongoing missions of US.
- It could very well increase budgetary allocations in the future.
- Resources would be diverted from the peaceful use of space for mankind to use of space for deterrence.
- Space corps could undermine American efforts in the domain of joint warfare.
- It potentially increases greater organisational uncertainty within the U.S. military.
- It could trigger the space weaponization race and space wars, creating concerns for national and international security.
- Space wars would be destructive for critical space infrastructure.
- Disrupt existing arms control instruments, in particular those related to nuclear weapons and missiles etc.

#### 5) Implications for India

- American military goals, which are still undefined in space, could still have consequences for India.
- India is a party to 1967 Outer Space treaty which bars nations from placing weapons of mass destruction in space.

- India is officially committed to PAROS, or the prevention of an arms race in outer space.
- India is yet to formulate a credible official response to the Trump plan.
- India is yet to establish a credible space-command of its own. Shifting focus to space would require diversion of resources from other wings.
- India may have to increase its defence budget to maintain deterrence in the new race.
- India's inter-services rivalries will have to be resolved about the command and control.
- The government needs to engage with multiple stakeholders directly about the role space weapons will play in India's grand strategy.

### 6) Concerns / Challenges

- Physical environment of space is not conducive to the conduct of military operations without incurring serious losses in the form of spacecraft and debris.
- The energy requirements are enormous.

### 7) Outer Space Treaty

- The Outer Space Treaty forms the basis of international space law.
- The treaty was opened for signature in the United States, the United Kingdom, and the Soviet Union on 27 January 1967, and entered into force on 10 October 1967.
- As of April 2018, 107 countries are parties to the treaty.
- The treaty affirmed "the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes".
- The exploration and use of outer space, including the Moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries.
- It bars states party to the treaty from placing nuclear weapons and weapons of mass destruction in Earth orbit.
- The treaty did not specifically ban the military use of outer space.
- Since then the military utility of space based technology has increased tremendously.

### 8) Peaceful use of outer space

- Technological developments in space have opened opportunities for many benefits to humanity including global communication systems and geological and meteorological information.
- The view of earth from outer space presents our planet as a unified, interconnected and unique kernel of life, which should not be fought over or destroyed by war.
- Thus, space in the 21st Century offers an opportunity to move towards a world of common security and disarmament rather than one of conflict and more arms races.