

“Space is vital to U.S. national security and our ability to understand emerging threats, project power globally, conduct operations, support diplomatic efforts, and enable global economic viability.” So opens our National Security Space Strategy (p. 1), highlighting the importance of space across all instruments of power. The newly revised JP 3-14 reiterates “Military, civil and commercial sectors of the US are increasingly dependent on space capabilities”, creating “a potential vulnerability as space becomes increasingly congested, contested, and competitive.” (JP 3-14, p. I-2) Points of interest to Airmen in the new JP 3-14 include the following:

### Space Situational Awareness (SSA) (p. II-1 to 3)

- SSA is now the fifth space mission area having been elevated from the space control mission area.
- “SSA is the requisite current and predictive knowledge of the space environment and the operational environment upon which space operations depend.”
- Four functional capabilities comprise SSA: characterization, detect / track / identify, threat warning and assessment, and data integration and exploitation.

### Space Deterrence (pp. I-2 – I-3)

- Joint force operations contribute to the nation’s multilayer approach toward deterring aggression against our space capabilities and infrastructure by:
  - Promoting and demonstrating responsible behavior when employing space capabilities;
  - Pursuing partnerships that encourage restraint in potential adversaries;
  - Contributing to quick attribution for attacks;
  - Protecting our space capabilities and infrastructures; and
  - Implementing appropriate responses should deterrence fail.

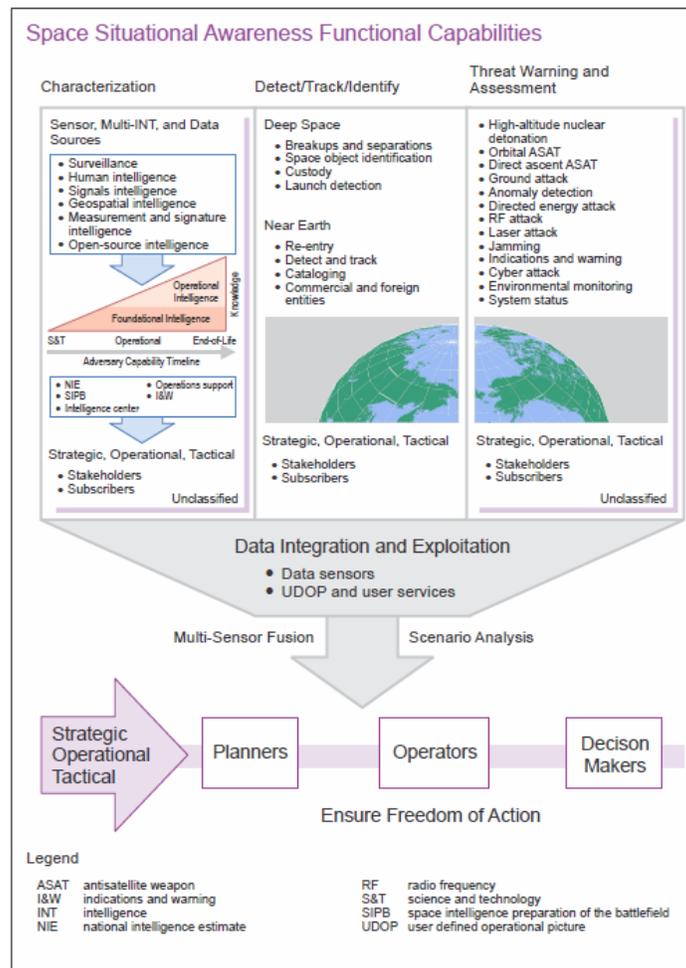


Figure II-1. Space Situational Awareness Functional Capabilities

- Under the mission area of Space Control: “Defensive Space Control contributes to space deterrence by employing a variety of measures that help assure the use of space....” (p. II-9)
- “Planners must develop options to deter, defend against, and if deterrence fails, to defeat efforts to interfere with or attack US or allied space systems.” (p. V-7)

### **Navigation Warfare (NAVWAR) (p. II-6)**

- NAVWAR refers to deliberate defensive and offensive action to assure friendly use and prevent adversary use of positioning, navigation, and timing (PNT) information through coordinated space, cyberspace, and electronic warfare (EW) capabilities.
  - “NAVWAR is further enabled by supporting capabilities such as ISR and spectrum management.”
- “At the operational level, a JFC may gain a desired advantage by integrating diverse capabilities to create NAVWAR effects.
  - Offensive and defensive NAVWAR operations must be integrated to ensure that friendly PNT information use is unimpeded when simultaneously attempting to deny adversary use....”
  - “JFCs should...balance intended NAVWAR effects and potential unintentional degradation to friendly forces’ equipment and impacts to civil, commercial, and scientific users....”
- “The USG is committed to minimizing impact to peaceful civil use of GPS outside of the operational area to ensure GPS becomes the space-based navigation capability of choice. JFCs should be aware of this commitment and factor it into NAVWAR planning and OPLANs.” (p. V-10)

### **Planning for contested space operations (p. V-1)**

- “JFCs should plan for joint forces to operate in and through a degraded, disrupted, or denied space environment. Planners should consult space or functional experts to discern which capabilities will not be available during the operation.”

### **Space Force Application (p. II-9)**

- “Space force application is combat operations in, through, and from space to influence the course and outcome of conflict by holding terrestrial targets at risk. The space force application mission area includes ballistic missile defense and force projection capabilities such as intercontinental ballistic missiles.”

### **Comparison to AFDD 3-14, *Space Operations*, 19 Jun 12 (p. 21)**

- While JP 3-14 lists five space mission areas—Space Force Enhancement (SFE), Space Support (SS), Space Control (SC), Space Force Application (SFA), and SSA—the Air Force currently uses three: Global Space Mission Operations (GSMO), SS, and SC, *supported* by SSA.
  - SFE was changed to GSMO to more specifically describe “force-enhancing capabilities that extend to national interests beyond military operations.”
  - As the latest AFDD 3-14 predates the new JP 3-14, the next revision to AFDD 3-14 will consider the question of elevating SSA to a mission area in Air Force space doctrine.
- “Additionally, the capabilities normally associated with the joint doctrinal concept of space force application—ballistic missile defense and force projection—are contained in more appropriate areas of Air Force doctrine.”

