

Appendix

Space Operations Annex

This appendix provides a template for developing a space operations annex to an operations plan. However, much of the information presented may not be required, depending on the echelon of command and the amount of detail contained in other annexes supporting the plan. To avoid duplication, refer to the basic operation plan and other annexes addressing space support where possible.

When preparing a space operations annex and supporting appendixes:

- Focus on unique space capabilities and their application to the operation.
- Refer to the space operations annex of the next higher command's OPLAN/OPORD.
- Cross-reference other annexes; avoid unnecessarily repeating information contained in other annexes.

Appendixes addressing the following topics may be included: communications; environment; navigation; reconnaissance, surveillance, and target acquisition; tactical warning, space control, and external space support. *Complete them only as required for amplifying details.*

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**ANNEX __, SPACE OPERATIONS, to OPLAN
or OPORD [nnnn-yy - Issuing Headquarters]**

1. () REFERENCES. List the space operations annex of the next higher command's OPLAN or OPORD and other documents, maps, overlays, and SOPS that provide guidance and information required for use with this annex.]

2. () TIME ZONE USED THROUGHOUT THE ORDER:

3. () SITUATION.

a. () General. [Describe planned and available space support to the OPLAN. Explain how to obtain and coordinate space support. List operational constraints and shortfalls. Describe relationships between supporting and supported organizations. Refer to other annexes or provide enough information about the overall situation to give subordinate and supporting units a clear understanding of the contemplated operations that require space operations support.]

b. () Enemy,

(1) () [Describe enemy space capabilities, how they will be used, and their value to the enemy.]

(a) () [Estimate the impact of enemy space capabilities on friendly operations. Describe notification or warning reports to friendly units of enemy space activities, including enemy reconnaissance, intelligence, surveillance, and target acquisition of friendly forces by manned and unmanned space systems. Refer to Annex __, *Intelligence*, for amplifying information.]

(b) () [Identify enemy space weaknesses and vulnerabilities, such as inadequate coverage, poor resolution, inability to launch new or replacement systems, and inability to counter the capabilities of friendly space systems.]

(2) () [Describe what the enemy is capable of doing and probably will do with his space, air, surface, or subsurface assets to interfere with friendly space systems and space operations that support the missions and tasks envisioned in this plan. Describe any known hostile space activities that deny access to space, deny the full capabilities of friendly space assets, or restrict friendly surface resources required by these space assets. Refer to Annex __, *Intelligence*, for amplifying information.]

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c. () Friendly. [In separate numbered subparagraphs, state the capabilities of external commands, units, forces, or agencies to provide space support to the operation, such as USSPACECOM, USARSPACE, Defense Information Systems Agency, DIA, NOAA, and NASA. Include non-DOD agencies and systems such as INTELSAT and INMARSAT. Identify systems available for communications, environment, navigation, surveillance, tactical warning, space control, nuclear detonation detection, or other application categories. Identify friendly space weaknesses and vulnerabilities. Describe changes or modifications to established procedures and memoranda of agreement or understanding that may be in effect. Use an appendix for detailed information. Refer to the next higher command and adjacent commands' space operations annex.]

d. () Assumptions. [State any assumptions not included in the basic plan relating to friendly, enemy, or third party capabilities and operations that may affect, negate, or compromise space capabilities. If any are critical to the success of the plan, indicate alternative courses of action.]

4. () MISSION. [State in concise terms the space tasks to be accomplished in support of the operations in the basic plan and describe the desired results in support of this OPLAN.]

5. () EXECUTION. [Space activities may range from satellite communications and intelligence support to space control operations. The functions required may vary greatly within the area of operations, the echelon of command, or between phases of the operation. This paragraph may, therefore, require considerable detail and development of alternative courses of action to accomplish the mission. Use appendices as necessary to provide detailed guidance.]

a. () Concept of Operations.

(1) () General. [State the general concept of space operations required to support the forces in the task organization of the OPLAN and briefly describe how they fit into the entire operation or refer to the basic plan. Emphasize the aspects of the basic plan that will require space support and that may affect space capabilities. State operations security (OPSEC) planning guidance for tasks in this annex and cross-reference other OPSEC Planning guidance for functional areas addressed in other annexes.]

(2) () Employment. [If the operation is phased, discuss the employment of space assets during each phase. Include discussion of priorities of access, usage, and capabilities in each phase. Discuss ability to launch new or replacement space systems.]

b. () Space Support. [Identify space support and procedures that will support the OPLAN. Include the following areas or add additional areas, as applicable. Use appendices for detailed discussion and information.]

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(1) () Communications. [Describe space systems that will support communications plans as described in the annex listing military and commercial satellites and ground systems that will provide support. Provide information sufficient to determine the time and duration of SATCOM support, including procedures for obtaining additional support. Refer to Annex __, *Command, Control and Communications Systems*, for amplifying information.]

(2) () Environment. Describe environmental support information—for example, meteorologic, oceanographic, geodetic—provided by space assets. List receivers and processors available and describe capabilities, products, and availability of weather and multispectral satellite data. Describe provisions to acquire, receive, or gain access to data from weather, multispectral, and other satellites that cannot be received by systems in the theater of operations. Describe provisions to deny the enemy access to data from civil weather satellites. Refer to Annex __, *Environmental Services*, for amplifying information.]

(3) () Navigation. Describe the capabilities of space-based navigation systems that will aid the position location and navigation of the force. Describe types of GPS receivers available to subordinate units and identify which receivers are unable to compensate for selective availability. Quantify the error caused by selective availability. If continuous three-dimensional coverage is not available, describe outage periods or times of reduced coverage. Describe requirements to jam or spoof GPS receivers that the enemy may be using. Describe requirements for differential GPS.]

(4) () Reconnaissance, Intelligence, Surveillance, and Target Acquisition. Describe systems, capabilities, and products available to friendly forces, including TENCAP, SIGINT, multispectral, and others. Describe intertheater and intratheater dissemination architecture and procedures. Refer to Annex __, *Intelligence*, for amplifying information.]

(5) () Tactical Warning. [Describe the capabilities of space systems to detect enemy ballistic missile attack or other enemy activities. Describe the capabilities of available systems (for example, the TERS) and identify coordination and channels needed to disseminate warnings quickly. Describe linkage and coordination with ground- and air-based radar systems. Refer to Annex __, *Intelligence*, for amplifying information.]

(6) () Space Control. [Describe actions performed by space, air, or surface assets to ensure friendly forces access to space or deny enemy forces unrestricted use of space and space assets. Include planned or anticipated actions in response to the enemy's use of space or denial of friendly access to space and space systems.]

c. () Tasks and Responsibilities. [In separate numbered subparagraphs, assign tasks and responsibilities to applicable subordinate units, supporting commands, or agencies providing support to the plan. For each of these tasks, provide a concise statement of the mission to be performed, providing sufficient

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detail to ensure that all elements essential to the operational concept are properly described.]

d. () Coordinating Instructions. [Provide necessary guidance common to two or more components, subdivisions, or agencies. Describe liaison requirements, if any.]

6. () SERVICE SUPPORT. [Provide broad guidance concerning administrative and logistics support for space operations. Address support of mobile or fixed space system assets within the area of operations or refer to another annex where this information is available. Describe support needed and who will provide it for any space-related ground stations supporting the command. Describe resupply procedures for cryptologic supplies. Refer to Annex __, *Logistics*, or pertinent command directives for amplifying information.]

7. () COMMAND AND CONTROL.

a. () [Indicate the difference, if any, between the command channels for the conduct of space activities and the command relationships established in the annexes. If applicable, state requirements for augmentation of appropriate headquarters with space operations personnel. Refer to the appropriate section of the applicable annex or the basic plan for general battle command support of space activities.]

b. () [Summarize requirements for general battle command systems support of space activities. Refer to the appropriate annex.]

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