DEPARTMENT OF THE AIR FORCE
UNITED STATES SPACE FORCE
SPACE SYSTEMS COMMAND

15 June 2023

MEMORANDUM FOR SEE DISTRIBUTION

FROM: HQ SSC/S3
Building 423 Room S312
1201 Edward H White II Street
Patrick Space Force Base FL 32925

SUBJECT: Spaceport of The Future (SOTF) Strategic Guidance

1. This memorandum provides strategic guidance intended to inform how the Eastern and Western Spaceports will allocate resources moving forward to implement the direction outlined in the Range of the Future (ROTF) 2028 Strategic Intent and the USSF Vision for a Digital Service. All future Launch and Test Range System (LTRS) funding requirements must address one or more of the following investment priorities.

2. Nested under several of these investment priorities are strategic goals which identify attributes each spaceport should strive to achieve, where operational needs dictate and available resources allow. Initial efforts in pursuit of these goals should result in the following outputs: baseline assessment of current ability to meet the stated objectives; key metrics regarding capabilities, processes, manning and costs associated with current operational models; limfacs outside spaceport control; assessment of feasibility to achieve stated objectives; cost and schedule estimates to acheve stated objectives; and if feasible, anticipated impacts to key metrics. Utimately, these outputs will provide leadership information necessary to make sound planning decisions and inform the Future Years Defense Program (FYDP).

3. Investment priorities and strategic goals are identified as follows:

a. Operations and sustainment – Activities necessary to keep the spaceport functioning. This priority has primacy over all others, with the one exception. The spaceports will no longer provide ground based flight termination services at the end of Fiscal Year 2030.

b. Capacity and agility enhancements – Activities which primarily aim to increase schedule capacity. Strategic goals:

i. Each Spaceport will be able to change, checkout, and control predefined mission configurations, for Autonomous Flight Safety System (AFSS) enabled launches, in one hour or less by 1 Oct 2025 (objective) but not later than 1 Oct 2028 (threshold).

ii. Each Spaceport will be able to support two (threshold) and three (objective) major operations concurrently by 1 Oct 2025 (objective) but not later than 1 Oct 2028 (threshold). (NOTE: subject to constraints such as flight and ground safety, spectrum, area clearance, infrastructure, etc.).

iii. Each Spaceport will have processes and systems in place to conduct a full flight safety analysis for a recurring mission partner and deliver data products to key stakeholders within 72 hours (threshold) or 24 hours (objective) from receipt of the flight data package.

iv. Each Spaceport will have the processes, systems and agreements in place to complete COLA analysis within 72 hours (threshold) or 24 hours (objective) from receipt of the flight data package for national security space and test missions.

c. Business process improvements – Activities which primarily aim to establish new business models in furtherance of the future spaceport vision or increase operational efficiency.

i. To the extent practical, and in accordance with the responsiveness and programmatic maturity of the customer, each Spaceport will onboard new customers within 6 months from Program Introduction. (NOTE: Onboarding begins with a Program Introduction and ends with Range Support Plan).

d. Digital transformation – Activities primarily focused on modernizing systems, processes and tools by employing modern software practices and technologies, such as cloud computing, DevSecOps, and data analytics in support of the USSF vision to be the first digital service.

i. Each Spaceport will make customer-requested post-mission data items available via a secure access-controlled portal to share operational information and metrics in electronic file format within 48 hours post-mission (threshold) or 24 hours (objective).

ii. Each Spaceport will provide initial, quick-look post-operation instrument performance assessments within 24 hours post-mission (threshold) or 1 hour (objective).

iii. All Spaceport systems will have native IP compliant interfaces by 2030 (objective) or 2035 (threshold).

iv. There will be a single data architecture encompassing administrative and operational data sets intended to facilitate comprehensive assessment of spaceport health and status (via a common operating picture) and integrate into a broader Space Access, Mobility, and Logistics construct (threshold) and other DoD systems and platforms (objective).

e. Common Operating Picture (COP) – Activities which enable each Spaceport to have access and contribute to a single enterprise common operating picture spanning the full suite of Assured Access to Space (AATS) mission areas. The AATS COP will facilitate collaborative planning; operational deconfliction; situational awareness; and timely, efficient, and effective mission execution by sharing operationally relevant data between multiple AATS locations and organizations.

i. Each Spaceport will continuously monitor and update the AATS COP on a 24/7 basis.

ii. The AATS COP will incorporate operationally relevant spaceport data, to include (but not limited to): a comprehensive view of day-of-launch countdown activites; launch vehicle in-flight situational awareness; commodity status; infrastructure and equipment outages; transportation movements; roadblocks; air/sea/land geospatial

surveillance (to include visual observation of on-going activities); weather forecasts and status; cyber health and security monitoring; physical security monitoring and status; industrial control systems; and other accessible data intended to inform decision-making for successful mission outcomes.

iii. Spaceport inputs to the AATS COP will integrate with operational and mission-enabling data from other AATS organizations resident on the COP (at both unclassified and classified levels), to include (but not limited to): launch mission assurance data; space flight worthiness certification; space mobility and logistics; rapid strategic delivery; tactically responsive space; and enterprise-tier AATS integration activites.

f. Standardization – Activities which primarily aim to provide a common user experience for customers served on both coasts, support cross-spaceport training and personnel utilization, or reduce the spaceport logistics footprint.

4. Definitions:

a. Spaceport – a collection of resources that include the geographic areas, services, and commodities needed to execute safe launch and test operations and collect data for Spaceport users. The geographic areas of the Spaceport include the designated land, air, and sea areas set aside, managed, and used for Spaceport activities by or for the Department of Defense. Spaceport services are the activities provided (or coordinated with external or institutional organizations to provide) for the needs of Spaceport operations. Spaceport commodities are the consumable material provided (or coordinated with external or institutional organizations to provide) for the needs of Spaceport operations.

b. Concurrently – personnel and systems delivering Spaceport services for different missions at the same time.

c. Major operation – a launch, attempted launch, pre-launch test, aeronautical test flight or other DoD weapon system test, return to launch site, or anomaly investigation event that uses Spaceport assets.

d. Predefined mission configuration – templated missions having destruct lines, chevrons, green numbers (duration of acceptable data loss), etc. previously established which could be utilized for multiple missions, trajectories, and pads.

e. Recurring mission partner – a launch service provider which frequently employs common flight trajectories and provides mature and consistent data products for flight safety analysis.

5. My point of contact is Maj Justin Jones (SSC/S3, 321-853-8846).

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