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Statement of Support for the Development of a Systems-Based, Integrated Operations Framework
for Suborbital and Orbital Commercial Spaceflight

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1. At present, the development of commonality in standards and related operational procedures, supporting infrastructure, training, verification, etc. in Commercial Spaceflight is considered “voluntary” by industry organizations such as the Commercial Spaceflight Federation, and has not yet been addressed formally by the FAA.
2. Existing, applicable regulations and standards within the FAA and NASA (to name two) are not yet integrated with any cohesive operational paradigm for Commercial Spaceflight.
3. The development of common standards and guidelines by industry and/or industry advocates is not keeping pace with the schedules for flight operations and the anticipated needs of either the government or the industry in assuring predictable and safe operations.
4. Failure to develop operations requirements, standards and the like, and to implement them across the industry, will inevitably result in governmental regulation in lieu of industry initiative. Historically, and despite the best of intentions, such governmental regulation lacks flexibility and levies considerable administrative burdens.
5. A “piecemeal” approach to developing operational standards will necessarily be “organic” and susceptible to market forces (such as, “first to market” will direct future adoption of certain operating guidelines simply because they are first put into play, rather than as a result of a careful consideration of all stakeholder needs (including the government and the public). As additional providers and spaceports/launch facilities come online, this may lead to conflicts in operational procedures being played out in the National Air Space (NAS).
6. The oncoming development and implementation of “NexGen” air traffic management system imposes requirements on all providers operating in the NAS. Commercial spaceflight operations must address the need to integrate with NexGen in areas such as broad area precision navigation, layered adaptive security, integration of weather into flight planning and real-time decision making, and performance based operations, in which subsystems must perform at various levels as a function of their integration into more-or-less busy airspaces.
7. The consequences of conflict in implementation of operations standards (e.g., red vs. green lights signifying active runways), or lack of clarity in operations standards (e.g., differing nomenclatures used to describe the same procedures or assumptions), or inability to manage predictable operations across individual spaceports with multiple providers or within the NAS, virtually guarantees an unknowable and highly variable degree of risk across the industry, including the risk of catastrophic events as a result of failure to integrate and standardize operations.
8. A “systems engineering and integration” (SE&I) approach to the development of operations standards and guidelines that incorporates “lessons learned” from commercial and military aviation as well as civil and military space-based operations, if used, will drive an organized, well-defined requirements analysis and operations framework optimized for a variety of spaceports, operators, space transportation providers, and the public.