

FLEXIBLE STAFFING: A TANGIBLE NEAR-TERM MOVE FOR U.S. SPACE REGULATION'S UNCLEAR FUTURE

*Matthew R. Gaske**

I. INTRODUCTION

Commercial spaceflight offers tremendous economic and scientific opportunities for humankind.¹ It has also become a key component of U.S. military capabilities and readiness,² particularly as outer space becomes a new theater for international conflict.³ Effective administration of this sector has therefore become an inarguable need.

However, federal governance of commercial outer space activities arises from a hodgepodge mixture of overlapping legal influences, ranging from broad international treaty language to detailed federal administrative

* J.D., Vanderbilt University Law School, 2016; M.B.A., University of Michigan Ross School of Business, 2023. The views expressed in this Article are the author's and are no indication of the views of any employers or institutions to which the author has, had, or will have an affiliation. © 2023, Matthew R. Gaske.

¹ See, e.g., *Start-up Space: Update on Investment in Commercial Space Ventures*, BRYCETECH 19 (Nov. 1, 2023), available at <https://perma.cc/52VV-B6XF> as “Start-Up Space Report” (“Since 2000, VC investment in start-up space companies has totaled \$40 billion, with 79% in the last five years.”); Nicole Mlynaryk, *UC San Diego First to Test Cancer Drugs in Space Using Private Astronaut Mission*, UC SAN DIEGO HEALTH (May 22, 2023), <https://perma.cc/Q9RA-6KXQ>; Landry Signé & Hanna Dooley, *How Space Exploration is Fueling the Fourth Industrial Revolution*, BROOKINGS (Mar. 28, 2023), <https://perma.cc/LHX6-DTXL>. See generally Ken Davidian & Greg Autry, *Taxonomy of Market-Level Space Organizations*, 213 ACTA ASTRONAUTICA 231 (2023) (detailing the economic layers to the commercial space industry); Harry W. Jones, *The Recent Large Reduction in Space Launch Cost*, 48th INT’L CONF. ON ENV’T SYSTEMS (2018), <https://perma.cc/WAU9-8DBB> (discussing the orders-of-magnitude reduction in U.S. launch cost over time and related consequences).

² See, e.g., *Commercial and Government Partnerships Essential for Space Innovation*, U.S. SPACE COMMAND (Sept. 22, 2023), <https://perma.cc/XTK2-87X8> (reporting U.S. Space Command General James Dickinson’s comments that “a balance of commercial capabilities and military capabilities” is necessary for contesting aggression); Eric Berger, *The US Military Just Proved It Can Get Satellites into Space Super Fast*, ARS TECHNICA (Sept. 15, 2023), <https://perma.cc/B7UC-FHJF> (“With its latest attempt at tactically responsive launch, the Space Force . . . contracted with the US launch company Firefly to put a spacecraft . . . into orbit within 24 hours of receiving the go command from the military.”); WHITE HOUSE, UNITED STATES SPACE PRIORITIES FRAMEWORK 6 (2021), <https://perma.cc/SL3G-Z6HM>.

³ David Vergun, *Official Details Space-Based Threats and U.S. Countermeasures*, U.S. DEP’T OF DEF. (Apr. 26, 2023), <https://perma.cc/LY4M-U3L9>; Sandra Erwin, *U.S. Generals Planning for a Space War They See as All but Inevitable*, SPACENEWS (Sept. 17, 2021), <https://perma.cc/GL7P-6EDF>.

processes superintended by various entities.⁴ Presently, there is no comprehensive U.S. space-law statutory scheme,⁵ and different regulators can weigh in on commercial spaceflight missions depending on diverse variables such as the mission’s progress or technical subject matter.⁶ To begin covering just some of the relevant entities, the Federal Aviation Administration’s (FAA) influence in orbital activity is limited; its role is largely constrained to launch activities and the return to atmosphere.⁷ Similarly, the Federal Communications Commission’s (FCC) main contact with spaceflight has generally involved spectrum allocation for transmitting data,⁸ and the Department of Commerce’s (Commerce) National Oceanic & Atmospheric Administration supervises “the operation of private remote sensing satellite systems” that view the Earth.⁹

This piecemeal arrangement has created situations where the unresolved scope of overlapping jurisdiction attracts negative feedback—even from opposing policy sides.¹⁰ A bipartisan desire to overhaul different regulators’ scope of authority has therefore emerged, though a party split has also emerged over preferred approaches.¹¹

Regardless of where this policy conflict ultimately lands, there is a concrete interim move available to help streamline the operational changes and agency restructuring likely demanded by a final policy. Specifically, a

⁴ See, e.g., Anastasia Slivker, *Global Outer Space Guide: United States*, NORTON ROSE FULBRIGHT (Sept. 2023), <https://perma.cc/47PB-4DCM>; P.J. Blount & Christian J. Robison, *One Small Step: The Impact of the U.S. Commercial Space Launch Competitiveness Act of 2015 on the Exploitation of Resources in Outer Space*, 18 N.C. J.L. & TECH. 160, 163-64, 180 (2016) (suggesting that the foundational document of international space law, the Outer Space Treaty, can be differently read through many political lenses because of its “ambiguities”).

⁵ See Ephrat Livni & Sarah Kessler, *The Space Industry Is Taking Off. Space Law Is Still a Mystery.*, N.Y. TIMES (June 17, 2023), <https://perma.cc/AFV2-448U>. See generally Meredith Blasingame, Comment, *Nurturing the United States Commercial Space Industry in an International World: Conflicting State, Federal, and International Law*, 80 MISS. L.J. 741 (2010) (describing part of the history of statutory coverage of spaceflight activities).

⁶ See Slivker, *supra* note 4.

⁷ Dale Skran & Dave Huntsman, *Should the FAA Regulate All Space Activities?*, SPACENEWS (June 10, 2023), <https://perma.cc/32EV-7EWJ>.

⁸ See, e.g., Julia King, *FCC Proposes More Spectrum Access for Commercial Satellite Launches*, FIERCEWIRELESS (July 31, 2023), <https://perma.cc/P84B-BQVH>.

⁹ *About the Licensing of Private Remote Sensing Space Systems*, NAT’L OCEANIC & ATMOSPHERIC ADMIN., <https://perma.cc/5KQR-X7FZ> (archived Dec. 31, 2023).

¹⁰ Jeff Foust, *Federal Agencies Caught in Environmental Crossfire over Starship Launches*, SPACENEWS (Dec. 15, 2023), <https://perma.cc/B9Z2-2E62> (“While environmental groups condemn the government for not doing enough to protect the environment from [SpaceX’s] Starship launches, others have argued those agencies are doing too much.”).

¹¹ See Chairman Lucas Opening Statement at Markup of H.R. 6213 & H.R. 6131, U.S. H.R. COMM. ON SCI., SPACE, AND TECH. (Nov. 15, 2023), <https://perma.cc/BB45-5NKM>.

more proactive and congressionally formalized exchange of personnel to transparently build formal networks and cultural bridges across U.S. regulators of commercial outer-space activities would provide tangible and immediate preparatory benefits for nearly certain changes to administrative authority. This kind of flexible-staffing approach can be useful if a regulatory reorganization occurs along proposed pathways, particularly because knowledgeable employees with expertise from different offices are likely to be transferred or hired into newly empowered agencies.¹² Without efforts to facilitate transition, these agencies might be worse off because of talent attrition in a highly technical area or productivity impairment from integration difficulties.¹³ Resulting delays or inefficiencies from these frictions are material in light of commercial and geopolitical competitive implications and the “dual-use” nature of commercial space assets, permitting free switching between defense and private-business uses on the same hardware platforms.¹⁴

A jurisprudential clock also may also be ticking. Even if political gridlock occurs that prevents formalized near- or mid-term reinvestment of authority,¹⁵ the major questions doctrine looms as an approaching roadblock for the space-oversight status quo.¹⁶

¹² See Sandra Erwin, *Space Force to Propose Personnel Reforms to Attract Tech Talent*, SPACENEWS (Aug. 20, 2020), <https://perma.cc/W9SV-GZHK> (exemplifying the governmental need for talent in this area).

¹³ See Stephen Heidari-Robinson, *Making Government Reorgs Work*, HARV. BUS. REV. (Mar. 30, 2017), <https://perma.cc/ET2T-WW45>; Pavel V. Ovseiko, Karen Melham, Jan Fowler, & Alastair M. Buchan, *Organisational Culture and Post-Merger Integration in an Academic Health Centre: A Mixed-Methods Study*, 15 BMC HEALTH SERV. RSCH. 1, 11 (2015) (examining the merger of two high-skill organizations and noting that “[t]he history of separateness and lack of collaboration between the [two groups] has created memories and stereotypes that negatively affect the staff’s attitudes towards integration and collaboration”); cf. Riikka M. Sarala, Eero Vaara, & Paulina Junni, *Beyond Merger Syndrome and Cultural Differences: New Avenues for Research on the “Human Side” of Global Mergers and Acquisitions (M&As)*, 54 J. WORLD BUS. 307, 313 (2019) (emphasizing the importance of communication in organizational change).

¹⁴ Jennifer A. Cannon, *Targeting Dual-Use Satellites: Lessons Learned from Terrestrial Warfare*, 2 AIR & SPACE OPERATIONS REV. 37, 37-38, 48-52 (2023); see Robert A. Manning, *Who Owns the Moon?*, FOREIGN POL’Y (May 2, 2023), <https://perma.cc/5MXG-49WM> (describing policy influences on the international competition for strategic access to the Moon).

¹⁵ Admittedly, another approach involves companies simply pursuing space activities in other jurisdictions after adverse interactions with U.S. authorities. Cf. Jeff Foust, *Varda Partners with Australian Range for Capsule Landings*, SPACENEWS (Oct. 23, 2023), <https://perma.cc/9JTE-LDH6>.

¹⁶ James E. Dunstan, *Regulating Outer Space: Of Gaps, Overlaps, and Stovepipes*, THE CTR. FOR GROWTH AND OPPORTUNITY AT UTAH STATE UNIV. 1, 3 (July 2023) <https://perma.cc/GFN9-TP4R> (considering the “the enabling statutes” of different federal space regulators in the context of the holding in *W. Va. v. Env’t Prot. Agency*, 142 S. Ct.

Thus, whether pressed by Congress, the Executive Branch, or the judiciary, structural change in the outer-space regulatory architecture has many foreseeable sources. This foreseeability enables preemptive action. Specifically, emphasizing preliminary efforts at integration, shared networks, and cultural comprehension to empower trained transition leaders¹⁷—particularly though more personnel transfers, exchanges, and secondments—carries clear potential benefits and addresses common reorganizational issues.

II. CHALLENGES TO THE CURRENT SPACE REGULATORY STRUCTURE

Currently, outer space activities are federally supervised by a wide variety of agencies, including the Department of Defense, the FAA, the FCC, the State Department, and more.¹⁸ The rapid expansion of the commercial space industry has put pressure on the regulatory status quo not just with policy choices but also regarding which agencies are best positioned to develop and enforce those policies.¹⁹

Proposals abound for remaking the U.S. commercial space regulatory regime, but the proposed Commercial Space Act of 2023 (CSA) and the November 2023 recommendation of the White House’s National Space Council (NSC) exemplify contrasting options.

First, the CSA offered by Representatives Brian Babin and Frank Lucas provides that the licensing necessary for the use of human objects in space be conducted through Commerce, including a requirement to submit

2587 (2022), and concluding that “[a]gencies that have historically regulated the activities of commercial businesses most (the FCC and FAA) may have the least regulatory authority over outer space activities, and an agency that historically has not regulated commercial activities (NASA) may currently possess the widest congressional mandate”).

¹⁷ Cf. Marie H. Kavanagh & Neal M. Ashkanasy, *The Impact of Leadership and Change Management Strategy on Organizational Culture and Individual Acceptance of Change During a Merger*, 17 BRITISH J. OF MGMT. S81, S98 (2006) (“[M]anagers responsible for driving the merger process were not equipped with appropriate communication or change management skills to manage the merger process effectively. . . . Appointment of a skilled change-management facilitator or champion to lead the change should occur at the start of any merger process.”).

¹⁸ Editorial, *Space Oversight and Regulatory Bodies*, SPACE FOUND., <https://perma.cc/4JN4-KGRZ> (archived Jan. 3, 2024); Slivker, *supra* note 4.

¹⁹ See, e.g., Edward Hearst, *Congress Should Stop the Coming Regulatory Assault on Commercial Space*, SPACENEWS (July 7, 2023), <https://perma.cc/T3GU-73K3>; Alyssa Goessler, *The Private Sector’s Assessment of U.S. Space Policy and Law*, AEROSPACE SECURITY – CTR. FOR STRATEGIC AND INT’L STUD. (July 23, 2022), <https://perma.cc/AAK3-4TR3>. See generally John Coykendall, Kate Hardin, Alan Brady, & Aijaz Hussain, *Riding the Exponential Growth in Space*, DELOITTE (Mar. 22, 2023), <https://perma.cc/SWB3-3JP7> (describing the expansion of the commercial space industry).

debris mitigation plans.²⁰ Moreover, Commerce would be the only federal agency that could determine space debris mitigation plans' compliance with international obligations under the Outer Space Treaty (OST),²¹ "address[ing] uncertainty" and promoting agility by streamlining regulatory approvals within one body and resolving interagency debates.²²

The same day the CSA went to committee markup, the NSC released a contrasting proposal that would delegate authority between the FAA's Office of Commercial Space Transportation (Transportation) and Commerce's Office of Space Commerce.²³ The proposal would have Transportation fill the current gap between its launch and return authority by licensing commercial actions and other pursuits in outer space.²⁴ In turn, the Office of Space Commerce would obtain authority over "uncrewed spacecraft not regulated by [Transportation]" such as those involved with "in-space servicing, assembly, and . . . debris removal."²⁵

Representatives Babin and Lucas are unlikely to adopt the NSC proposal, however. Rep. Lucas addressed the NSC approach, stating that while he "respect[s] that effort, these proposals simply go in the wrong direction and hurt rather than support America's space industry" because the increase in licenses needed and involvement from additional agencies

²⁰ *Babin and Lucas Introduce Legislation to Modernize Commercial Space Sector*, U.S. H.R. COMM. ON SCI., SPACE, AND TECH. (Nov. 2, 2023), <https://perma.cc/4RYC-383E>; *see also* Commercial Space Act of 2023, H.R. 6131, 118th Cong. § 80104 (2023).

²¹ Commercial Space Act of 2023, H.R. 6131, 118th Cong. § 80204 (2023).

²² Jeff Foust, *New Commercial Space Bill Addresses Mission Authorization and SSA*, SPACENEWS (Nov. 5, 2023), <https://perma.cc/8ELN-SHVD>; *see* Marilyn Harbert & Asha Balakrishnan, *Why Space Debris Flies Through Regulatory Gaps*, ISSUES IN SCI. AND TECH. (2023), <https://perma.cc/W5WJ-M6GB> (providing examples of interagency disagreement regarding authorization to regulate orbital debris and noting that "authority and expertise are dispersed across the US government, complicating efforts to reduce or remove debris" with the result that, "for the foreseeable future, the shared domain of low Earth orbit lacks enforceable regulations to keep orbits clear of hazards"); Brian Higginbotham, *Space Debris Concerns Create 'Dust-Up' Between the FCC and Commerce*, U.S. CHAMBER OF COM. (Apr. 11, 2019), <https://perma.cc/FU76-M5MG> (recognizing the practical difficulty for agile evolution of policy in an area governed by multiple agencies: "[a]s is common with such exercises, a food fight regarding bureaucratic turf has emerged over space debris that threatens the roll-out of these [modernization] initiatives").

²³ Jeff Foust, *White House Proposal Would Split Mission Authorization Between Commerce and Transportation*, SPACENEWS (Nov. 15, 2023), <https://perma.cc/8CMC-JSVJ>; Theresa Hitchens, *White House Asks Congress to Split 'New Space' Authority Between Commerce, Transportation*, BREAKING DEFENSE (Nov. 15, 2023), <https://perma.cc/GPF5-WJWG>. *See generally* Draft Bill Text: "Authorization and Supervision of Novel Private Sector Space Activities Act," NAT'L SPACE COUNCIL, <https://perma.cc/N4A8-C469> (archived Jan. 3, 2024).

²⁴ Foust, *supra* note 23 (summarizing headliner aspects of proposal).

²⁵ *Id.*

“expands the number of people who . . . can veto spaceflight activities.”²⁶ Thus, the interplay between the Biden Administration-backed NSC and Republican representatives illustrates the potential for political gridlock in the restructuring of the space regulatory field.

Therefore, a third possibility is that this political gridlock will perpetuate the status quo. In this case, agencies are left to try to leverage existing authority to confront nascent issues as the commercial space industry expands. One example is the FCC’s regulations addressing space debris: high-speed objects in orbit that can substantially damage other orbital objects currently in use.²⁷ This is an area of critical importance, with orbital debris having been described as “the number one threat to spacecraft, satellites, and astronauts.”²⁸ FCC Commissioner Nathan Simington shed light on the FCC’s perspective on its authority to regulate in this area, stating: “The Commission has asserted its authority over orbital debris for two decades, and, for the most part, we haven’t heard boo about it. The Commission asserts its authority over far more contested domains And yet, for twenty years, crickets have chirped in the long regulatory grasses of orbital debris.”²⁹ However, noting a lack of challenges does not mean that a policy necessarily would survive a potential challenge.³⁰ Rather, as the industry has grown, increased friction with regulators’ standard operations could encourage such a move.³¹

In fact, the major questions doctrine looms for aspects of the United States’ current approach to space regulation. That doctrine is the judicial “presum[ption] that ‘Congress intends to make major policy decisions itself, not leave those decisions to agencies,’” even when challenged “regulatory assertions ha[ve] a colorable textual basis.”³² Skepticism exists around whether the FCC’s approach to addressing orbital debris under this doctrine would withstand such a challenge due to a lack of sufficiently clear textual

²⁶ Chairman Lucas Opening Statement at Markup of H.R. 6213 & H.R. 6131, U.S. H.R. COMM. ON SCI., SPACE, AND TECH., (Nov. 15, 2023), <https://perma.cc/V2Q6-BMK8> (archived Jan. 3, 2024).

²⁷ *FCC Adopts New ‘5-Year Rule’ for Deorbiting Satellites to Address Growing Risk of Orbital Debris*, FCC (Sept. 29, 2022), <https://perma.cc/M89E-65RH>; see Mike Wall, *Kessler Syndrome and the Space Debris Problem*, SPACE.COM (July 14, 2022), <https://perma.cc/5RAK-7L6N>.

²⁸ Heather F. Riley, *Micrometeoroids and Orbital Debris (MMOD)*, NAT’L AERONAUTICS AND SPACE ADMIN. (June 14, 2016), <https://perma.cc/9CJV-4LB6>.

²⁹ Commissioner Simington Address to Hudson Institute, FCC (May 22, 2023), <https://perma.cc/U3BV-BV5H>.

³⁰ See *McGirt v. Oklahoma*, 140 S. Ct. 2452, 2482 (2020) (“Unlawful acts, performed long enough and with sufficient vigor, are never enough to amend the law.”).

³¹ Cf. Jeff Foust, *SpaceX Frustrated by Starship Licensing Delays*, SPACENEWS (Oct. 20, 2023), <https://perma.cc/6N4W-VZ77>.

³² *W. Va. v. Env’t Prot. Agency*, 142 S. Ct. 2587, 2609 (2022) (citation omitted).

permission from Congress.³³

Acceleration of the U.S. commercial space community's growth and reach via governmental responsiveness is not the only reason to commit resources towards the efficient integration and continuity of regulatory operations in a time of change. As mentioned above, another source of influence is the OST, ratified by the U.S. Senate in 1967 and adopted in some form by roughly half of the global community.³⁴ Among its potential obligations, the OST may require some exercise of ongoing regulatory authority over U.S. entities during spaceflight.³⁵ Thus, reasonably tangible benefits like workforce flexibility's improvement of operation continuity aligns with ongoing compliance with international obligations. Visible and demonstrative efforts to meet international obligations are particularly crucial now, as the U.S. seeks a credible leadership role in international space governance by promoting and gaining country signatories to the Artemis Accords, "a non-binding set of principles designed to guide civil space exploration and use in the 21st century."³⁶

In sum, policy debates, external contexts, and jurisprudential shifts suggest that some remake of agency oversight over commercial space activities is likely. The growth and smooth operation of the commercial spaceflight industry counsels in favor of laying the groundwork now to benefit when the exact contours of a settled approach lands.

III. ADDITIONAL PERSONNEL EXCHANGE: WHY AND HOW?

Governmental reorganizations notoriously tend to fall short of stated

³³ Michael B. Runnels, *On an American Strategy to Forge Global Space Law to Curtail Orbital Debris in the New Space Age*, 19 S.C.J. INT'L L. & BUS. 151, 159 (2023); see Dunstan, *supra* note 16, at 18-19, 24-29; see also Harbert & Balakrishnan, *supra* note 22 (highlighting the "public interest" standard exercised by the FCC towards orbital debris and noting that "[i]t's apparent that the FCC is stepping in to fill a regulatory gap, but its role overseeing orbital debris is not crystal clear.").

³⁴ See, e.g., Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, ratified Jan. 27, 1967, 18 U.S.T 2410, 610 U.N.T.S. 205; Loren Grush, *How an International Treaty Signed 50 Years Ago Became The Backbone for Space Law*, THE VERGE (Jan. 27, 2017, 9:14 AM MST), <https://perma.cc/6XVH-89BX>.

³⁵ See e.g., Kelsey Eyanson, *Billionaires Eclipse NASA: The Next Space Race over National Regulation*, 60 HOUS. L. REV. 1181, 1201-03 (2023); Braden N. Anderson, *Mining the Milky Way: How to Bring America's Extraterrestrial Excursions Back Into Compliance With International Obligations*, 87 J. OF AIR L. & COM. 637, 675 (2022).

³⁶ *Artemis Accords*, U.S. DEPARTMENT OF STATE, <https://perma.cc/E8DK-QDGE> (archived Jan. 3, 2024) ("As of December 2023, there were 33 signatories . . ."); NASA, THE ARTEMIS ACCORDS: PRINCIPLES FOR COOPERATION IN THE CIVIL EXPLORATION AND USE OF THE MOON, MARS, COMETS, AND ASTEROIDS FOR PEACEFUL PURPOSES (2020).

objectives.³⁷ Yet improved communication among the space-focused federal workforce and a wide understanding among employees of the rationale for a move may help structural change be both rapid and effective while retaining necessary employees that might otherwise resign in an expertise-hungry field.³⁸ Critically, congressional formalization of these efforts may progress the debate on the oversight allocation issues by both:³⁹ 1) helping remove these concerns from a negotiating table and 2) giving policymakers a better understanding of informal interagency connections that could be leveraged when changing space regulation's architecture.

There would certainly be costs from different offices exchanging personnel, who then need to get up to speed to contribute, at a time when work demands are high. However, the mitigation of risks and potential to streamline the execution of later organizational changes could be a major boon,⁴⁰ as an inability to adapt culture can substantially impair organizational reworks.⁴¹

Those employees who have learned the cultures and working styles of both an originating and destination agency have the opportunity to bridge gaps and mobilize their colleagues to embrace a shared mission in a new setting with a new web of social relationships to navigate.⁴² Indeed, people's

³⁷ Stephen Heidari-Robinson, *Making Government Reorgs Work*, HARV. BUS. REV. (Mar. 30, 2017), <https://perma.cc/Z49R-6HA5> (leveraging survey data to conclude that, in public sector reorganizations, “while 75% delivered some benefits, only 13% delivered the planned objectives in the planned time. About the same proportion (14%) actually hurt the organization.”).

³⁸ *See id.* (“[I]n 45% of government reorgs, personnel the department wanted to retain exited the organization.”); *see also* Miriam Kramer, *The Space Industry's Looming Workforce Problem*, AXIOS (Sept. 12, 2023), <https://perma.cc/LQX5-T67P>.

³⁹ *See* HENRY HOGUE, CONG. RSCH. SERV., R44909, EXECUTIVE BRANCH REORGANIZATION 4, 13 (2017) (providing an illustration of when a congressional appropriations proposal led to eventual agreement over the composition of an office within the Department of Agriculture and noting a relative benefit of statutory approaches: “Arguably, a mechanism set by statute could be more durable across Administrations, while one established by executive order reflects the incumbent President’s interest and authority.”).

⁴⁰ Bryan Walker & Sarah A. Soule, *Changing Company Culture Requires a Movement, Not a Mandate*, HARV. BUS. REV. (June 20, 2017), <https://perma.cc/Y975-KVF3>.

⁴¹ *See, e.g.,* Michele Gelfand et al., *One Reason Mergers Fail: The Two Cultures Aren't Compatible*, HARV. BUS. REV. (Oct. 2, 2018), <https://perma.cc/3C37-Y3XB>.

⁴² Walker & Soule, *supra* note 40 (“Effective movement makers are extremely good at building coalitions, bridging disparate groups to form a larger and more diverse network that shares a common purpose.”); *see also* Bill Lescher, *Lessons from the U.S. Navy on Building a Culture of Learning*, HARV. BUS. REV. (Nov. 28, 2023), <https://perma.cc/3W3S-YP2L> (emphasizing the contributions of integrated organization and vulnerable self-reflection towards “increas[ing] the number of mission-ready F/A-18s from 260 to 341 within a year.”). John S. Oakland & Stephen Tanner, *Successful Change Management*, 18 TOTAL QUALITY MGMT. 1, 14-15 (2007) (describing how organizational culture can be leveraged as a change

mutual understanding and buy-in for an organization's goals are essential to maximizing its effectiveness.⁴³ This is particularly important when different proposals tend to coalesce around specific agencies, such as with Commerce, discussed *supra*. With this additional step of clarity, it may make sense for personnel on both a personal and organizational level to test the waters. Thus, policymakers or staff members could be encouraged or enabled to make these preliminary moves now, even when the end regulatory arrangement is not perfectly clear.⁴⁴

Specifically, a policy emphasis on “external detail[s],” which “is when an employee goes to work in another agency on a temporary basis” in accordance with an “interagency agreement” or similar accord, could be useful here.⁴⁵ There could be comparatively minor, potentially less contentious legislation directed specifically at space-facing agencies to promote and accelerate these vehicles of expertise circulation. For example, this could take the form of explicit carveouts or accelerated processes in the Intergovernmental Personnel Act, a statute mainly used for the exchange or transfer of expertise from federal entities to state and local governments.⁴⁶

While some kind of accountability approach would be necessary from lawmakers' perspectives, a push to adopt this approach should be a soft one to avoid overtaxing the existing bottlenecks in the space industry administrative processes.⁴⁷ Congressional requirements, such as an agency's internal selection of an existing leader to be responsible for promoting interested staff movement, could be a useful tactic with a lower lift follow-up,⁴⁸ such as a letter report to a relevant congressional committee keeping lawmakers substantively informed.

One notion to account for from the legislative side is addressing a tactic available to the executive administration in this situation. Legislation

asset).

⁴³ See, e.g., Frank Ostroff, *Change Management in Government*, HARV. BUS. REV. (May 2006), <https://perma.cc/7KJV-G28R>.

⁴⁴ This view is offered cognizant of the potential for competition and longstanding disagreements among agencies and intra-agency groups. See generally David A. Hyman & William E. Kovacic, *State Enforcement in a Polycentric World*, 2019 BYU L. REV. 1447 (2020) (describing such relationships among entities).

⁴⁵ GENERAL SERVICES ADMINISTRATION: TECHNOLOGY TRANSFORMATION SERVICES, *Details with Other Agencies*, TTS HANDBOOK, <https://perma.cc/WA5H-TZJX> (archived Jan. 3, 2024).

⁴⁶ See 5 U.S.C.A. §§ 3371-3375 (2023); see also 5 C.F.R. § 334.101 *et seq.* (2023).

⁴⁷ Kristin Fisher, *Exclusive: 'Act Now' to Keep US Competitive in Space Race, Senators Say*, CNN (Nov. 21, 2023), <https://perma.cc/5SVH-9X8S> (describing a bottleneck example and the international relations pressure for quick administrative work).

⁴⁸ TODD GARVEY & SEAN M. STIFF, CONG. RSCH. SERV., R45442, CONGRESS'S AUTHORITY TO INFLUENCE AND CONTROL EXECUTIVE BRANCH AGENCIES 4-5 (2023) (describing Congress's different levers to influence agencies).

can allot resources while pressuring streamlined operations to facilitate these transfers, exchanges, or secondments. Executive-branch entities could then begin assigning personnel to entrench a preferred regulatory structure for leverage in further negotiations. Accordingly, any legislative bolstering of personnel flexibility in space regulation may have a policy goal of generally evenly exposing employees to other work in the space regulatory arena. While potentially creating some short-term inefficiencies, this approach would help avoid a *de facto* workaround of debate and thus help create a broader span of cultural and social interconnectivity across the U.S. space regulators.

Therefore, a formalized process of preliminary bridge-building made with this oversight allocation in mind could provide foreseeable benefits in a critical sector of growth.

IV. CONCLUSION

In sum, facilitating staffing flexibility across U.S. space regulators is a relatively concrete benefit that can help facilitate positive goal execution once the current policy debates on regulatory architecture become settled. Either through competing proposals winning out or challenges such as the major questions doctrine, foreseeable challenges to the regulatory status quo create the urgency that makes seizing this kind of concrete benefit worthwhile.