FAILURE TO LAUNCH: WHY NASA'S UNCHECKED USE OF OTA POWER MAY ONE DAY DOOM THE AGENCY

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I. INTRODUCTION

When a government agency works with a private company to accomplish a goal, the agreement is usually in the form of a government procurement contract.[1] Government agencies work with private companies in order to have access to the most recent research and technologies.[2] These contracts are governed by the Federal Acquisition Regulation (FAR),[3] which outlines the steps an agency must take to ensure that the bidding process is fair.[4] If a company's bid is rejected, it can appeal the decision to the Government Accountability Office (GAO).[5] The GAO has the power to void government procurement contracts.[6]

When it was created by Congress, the National Aeronautics and Space Administration (NASA) was given a special power allowing the Agency to bypass FAR requirements.[7] The power is known as NASA's "other transaction authority" (OTA).[8] NASA has used this power to work with private companies on a wide range of projects.[9] When NASA works with a company via its OTA power, the agreement that governs the

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[1] *See* Surya Gablin Gunasekara, *"Other Transaction" Authority: NASA's Dynamic Acquisition Instrument for the Commercialization of Manned Spaceflight or Cold War Relic?*, 40 PUB. CONT. L.J. 893, 895–96 (2011) (providing an overview of the procedures that govern government procurement contracts).

[2] *See* Nancy O. Dix et al., *Fear and Loathing of Federal Contracting: Are Commercial Companies Really Afraid to do Business with the Federal Government? Should They Be?*, 33 PUB. CONT. L.J. 5, 7 (2003) (explaining that the government no longer conducts as much research as the private sector does).

[3] *See* Gunasekara, *supra* note 1, at 896 (providing an overview of the Federal Acquisition Regulation (FAR) and providing examples of ways the FAR controls the procurement process).

[4] *See generally id.* at 895–96 (describing the guidance that agencies must follow in order to ensure that FAR guidelines are met).

[5] *See generally id.* at 900 (explaining that the power to review bid protests has strengthened competition).

[6] *See* Michael J. Schaengold et al., *Choice of Forum for Federal Government Contract Bid Protests*, 18 FED. CIR. B.J. 243, 269 (2008) (providing an explanation on the Government Accountability Office's (GAO) power).

[7] *See* Gunasekara, *supra* note 1, at 894 (discussing the reasons why Other Transaction Authority (OTA) power is so unlimited and explaining why OTA power is not subject to FAR requirements).

[8] David S. Schuman, *Space Act Agreements: A Practitioner's Guide*, 34 J. SPACE L. 277, 278 (2008) (providing insight into how the National Aeronautics and Space Administration's (NASA) legal department uses OTA power).

[9] *See id.* at 283–84 (showing other examples of SAA use, including: collaborating with Jamestown, Virginia to develop educational exhibits in commemoration of the 400th anniversary of the landing at Jamestown, and testing new Olympic swimsuits in preparation of the 2008 summer Olympics in Beijing).

relationship is known as a Space Act Agreement (SAA).[10] SAAs are not subject to FAR requirements and are not subject to GAO review.[11] While this is good for the Agency, it leaves the companies whose bids are rejected with nowhere to turn. As the space industry moves towards the private sector, it is important for NASA to encourage the industry's growth. NASA should recognize the unfairness of its current practice and provide companies with an outlet to voice their displeasure with the Agency's decision. If NASA does not change, private space companies could stop bidding to work with NASA altogether. NASA could find itself out of the space race.

This Comment seeks to analyze the history of NASA's OTA power and how it affects the private space industry today. Part II looks at the environment that fostered NASA's creation, investigates how the Agency interpreted its OTA power, and discusses the differences between a typical government procurement contract and an SAA. Part III seeks to answer how NASA is using its OTA power today. It includes a statutory and textual analysis of the National Aeronautics and Space Act of 1958 (Space Act) and explains how a court would interpret the statute. Part III also explains the GAO's decisions to not allow challenges to NASA's OTA power. Finally, Part IV looks to the future of commercial space flight and provides NASA with recommendations on how to provide businesses with an avenue to question its OTA power.

II. NASA'S CREATION AND HOW THE AGENCY HAS USED ITS OTA POWER

A. The National Aeronautics and Space Act of 1958

In 1957, the Soviet Union launched the first man-made satellite, *Sputnik*, into orbit.[12] The United States was worried that the Soviet Union would win the space race.[13] President Eisenhower knew that the United States had to regain the world's respect and decided to make space exploration a government program.[14] As a result, Congress passed the Space Act in 1958.[15] The Space Act created NASA.[16] To help NASA achieve its goal of beating the Soviet Union, the drafters of the Space Act

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[10] *See id.* at 280 (discussing NASA's OTA power and its connection to Space Act Agreements (SSAs).

[11] *See id.* (explaining that SAAs are not to be used as part of the routine procurement process).

[12] Paul G. Dembling, *The National Aeronautics And Space Act of 1958: Revisited*, 34 J. SPACE L. 203, 203 (2008).

[13] *See id.* (explaining the tense political and social climate in the United States during the "Space Race").

[14] *See id.* at 205–06 (remembering that President Dwight D. Eisenhower originally wanted NASA to be a part of the Department of Defense but he was ultimately persuaded to make NASA a civilian agency).

[15] *Id.* at 206.

[16] *See id.* (explaining the National Aeronautics and Space Act of 1958 (Space Act)).

gave NASA its OTA power.[17] The power was never given to an agency before, and it represented an unprecedented grant of power.[18]

B. An Overview of the Scope and Use of NASA's OTA Power

NASA has interpreted its OTA power to be very broad and the Agency has used its power in seemingly every aspect of its operation.[19] The Agency has used its OTA power "thousands of times" and "use[s] it almost every day."[20] NASA issues three types of SAAs.[21] There are reimbursable SAAs, non-reimbursable SAAs, and funded SAAs.[22] A reimbursable SAA is when NASA gets the costs associated with the agreement reimbursed by the outside company.[23] A non-reimbursable SAA is when NASA and the partners associated with the agreement each bear the cost of their respective participation.[24] Therefore, "there is no exchange of funds between [any of] the parties."[25] A funded SAA is when NASA transfers funds to a domestic partner in order to accomplish an agency goal.[26] These different SAAs showcase the seemingly infinite ways the Agency can use its OTA power. SAAs, regardless of what type, are much more flexible to both the Agency and the company when it comes negotiating to and administering the agreement.[27] NASA has the ability to structure agreements differently according to the type of business with which it seeks to work.[28]

1. OTA and the COTS Program

NASA decided it would use its OTA power to replace the space shuttle.[29] When the space shuttle was retired, NASA was left without a way to carry cargo or astronauts to the International Space Station (ISS).[30] The

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[17] *See id.* at 210–11 (discussing that the drafters believed that OTA power was unlimited and they wanted NASA to have the power to overcome any contingency).

[18] *See id.* at 211 (explaining that the Space Act represented the first time an agency was given OTA power).

[19] *See* Schuman, *supra* note 8, at 278 (showing the flexibility OTA power allows).

[20] *Id.*

[21] *Id.* at 282.

[22] *Id.*

[23] *See generally* NASA POLICY DIRECTIVE (NPD) 1050.2(1)(d)-(e) (2013), *available at* http://nodis3.gsfc.nasa.gov/displayDir.cfm?t=NPD&c=1050&s=2 (discussing the reimbursable SAA). For reader clarification, this source refers to specific forms of SAAs as Cooperative Research and Development Agreements (CRADAs). *Id.*

[24] *See generally* Space Act Agreements Guide, 13-14 (2008), *available at* http://www.nasa.gov/pdf/289016main_Space%20Act%20Agreements%20Guide%202008.pdf.

[25] Schuman, *supra* note 8, at 282.

[26] *Id.*

[27] Dix et al., *supra* note 2, at 28.

[28] *See* Gunasekara, *supra* note 1, at 897 (showing NASA's ability to use SAAs to its advantage).

[29] *See generally* NASA Commercial Crew & Cargo Program Office, *NASA Commercial Orbital Transportation Services*, NASA, http://nasa.gov/offices/c3po/about/c3po.html (last visited Mar. 7, 2015) (providing an overview of the Commercial Orbital Transportation Services (COTS) program and its use of SAAs).

[30] *See* Tariq Malik, *NASA to Fly Astronauts on Russian Spaceships at Nearly $63 Million per Seat*, SPACE.COM (Mar. 14, 2011, 5:50 PM), http://www.space.com/11125-nasa-russia-soyuz-deal-

United States government was paying Russia to carry astronauts to the ISS.[31] NASA recognized that, in order to remain an international space power, it needed to turn to the private sector.[32] The Agency launched the Commercial Orbital Transportation Services (COTS) program.[33] The COTS program had three main objectives: (1) to implement United States space policy with an investment to stimulate the private space industry; (2) to facilitate the private space industry's demonstration of cargo and human space transportation to make the process cheaper and more reliable; and (3) to create a market environment that would open space transportation to the government and ordinary citizens.[34] When NASA sent astronauts to the moon, NASA was the primary customer for contractors.[35] Due to insufficient resources, the COTS program envisioned NASA as a partner in the new private space market, as opposed to NASA's usual role as the only player in the space business.[36] NASA even believed that it could use COTS as a vehicle to return to the lunar surface for a new science campaign.[37] The program used SAAs to memorialize the agreements between NASA and the private companies.[38]

The program was a resounding success for NASA.[39] Companies from all over the country submitted their applications to work with NASA.[40] SpaceX and Orbital Sciences, both private space companies, were awarded SAAs through the COTS program.[41] The COTS program, however, was not limited to SpaceX and Orbital Sciences; many other companies submitted

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spaceflights.html (outlining NASA's future options for humans access to space, including the International Space Station (ISS)).

[31] Marcia Dunn, *$70 Million per Seat? NASA to Pay Russia Huge Sum to Send Astronauts to ISS*, HUFFINGTON POST (Apr. 30, 2013, 3:32 PM), http://www.huffingtonpost.com/2013/04/30/70-million-per-seat-nasa-russia_n_3187481.html.

[32] Valin Thorn, Deputy Manager, NASA's Commercial Crew & Cargo Program, Commercial Crew and Cargo Program Overview Presentation at the AIAA Aerospace Sciences Meeting 25 (Jan. 11, 2007), http://www.nasa.gov/pdf/168735main_AIAA_2007_COTS.pdf.

[33] *See id.* at 4 (explaining the COTS program).

[34] *Id.*

[35] *See* Robert M. Kelso, Manager, NASA's Commercial Space Development, Commercial Space Development – What's the Next? Presentation at ESMD Technology Exchange Conference 10 (Nov. 20, 2007), http://www.nasa.gov/pdf/203082main_C3PO%20-TEC%20Briefing%20Nov_2007.pdf (recalling when NASA contracted for its own spacecraft, instead of services and capabilities).

[36] *See id.* (explaining that NASA no longer would develop its own spacecraft; NASA would instead work with a private company).

[37] *See id.* at 13–20 (recalling that NASA believed it could use public interest as leverage to help attract a public/private partnership that would lower costs and increase scientific return).

[38] *See* Schuman, *supra* note 8, at 284 (explaining the use of SAAs in the COTS program).

[39] NASA COMMERCIAL CREW & CARGO PROGRAM OFFICE, http://www.nasa.gov/offices/c3po/home/#.VIH6YaTF_dc, (last visited Mar. 3, 2015).

[40] *See* Brian Berger, *NASA Signs Space Act Agreements with Three More Firms*, SPACE.COM (June 19, 2007, 9:38 AM), http://space.com/3975-nasa-signs-space-act-agreements-firms.html.

[41] Chris Bergin, *SpaceX and Orbital Win Huge CRS Contract from NASA*, NASA SPACEFLIGHT.COM (Dec. 23, 2008), http://www.nasaspaceflight.com/2008/12/spacex-and-orbital-win-huge-crs-contract-from-nasa/.

bids that were rejected by NASA.[42] Since the program used SAAs, the companies whose bids were rejected by NASA had nowhere to turn to question the Agency's decision.

NASA has announced a new program, similar to COTS, called the Commercial Crew integrated Capability (CCiCAP) program.[43] The program was launched in 2012 and aims to facilitate safe, reliable, and cost effective human transportation into space.[44]

C. SAAs and Government Procurement Contracts: A Comparison

1. Federal Acquisition Regulation

When an agency contracts with a private company for a product that the agency has a direct need or use for, that contract is subject to the FAR.[45] The FAR establishes how agencies communicate with companies, how contracts are awarded, and how these contracts are administered.[46] The purpose of the FAR is to ensure that a company working with the government is satisfied "in terms of cost, quality, and timeliness of the delivered product or service . . . ."[47] These goals are achieved through maximizing the use of commercial products, using contractors with successful past performances, and promoting competition.[48] The FAR also stresses "[c]onduct[ing] business with integrity, fairness, and openness . . . ."[49]

2. When an Agency Must Follow the FAR

The government must use a procurement contract "when the principal purpose of the [agreement] is the acquisition of property or services for the direct . . . use of the . . . [g]overnment."[50] SAAs can be "used when the . . . purpose of the transaction is to transfer money . . . or services" with the goal of supporting or stimulating a public purpose.[51]

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[42] Chris Bergin, *Orbital Beat a Dozen Competitors to Win NASA COTS Contract*, NASA SPACEFLIGHT.COM (Feb. 19, 2008), http://www.nasaspaceflight.com/2008/02/orbital-beat-a-dozen-competitors-to-win-nasa-cots-contract/.

[43] *See* Phillip McAlister, Director, NASA's Commercial Spaceflight, Presentation of CCiCAP Announcement Summary Portfolio 2 (Aug. 3, 2012), http://www.nasa.gov/pdf/672130mainCCiCap%20Announcement.pdf (outlining the goals of the CCiCAP project).

[44] *See id.* at 3, 8–13 (explaining the origins and objectives of the program).

[45] Gunasekara, *supra* note 1, at 895–96.

[46] *Id.* at 896.

[47] Federal Acquisition Regulations System, 48 C.F.R. § 1.102(b) (2013).

[48] *Id.*

[49] *See id.* § 1.102(b)(3) (showing that transparency is also very important to the FAR).

[50] Courtney B. Graham, Associate General Counsel, NASA's Commercial and Intellectual Property Practice Group, Presentation of NASA Recent Developments: Space Act Agreements vs. Contracts 4, http://americanbar.org/content/dam/aba/administrative/science_technology/10_11_11_spaceact_ppt.authcheckdam.pdf.

[51] *Id.* (showing when SAAs, as opposed to a procurement contract, can be used by NASA).

3. NASA Federal Acquisition Regulation Supplement

In addition to the FAR, when NASA enters into a contract that is not a SAA, it also must abide by the NASA Federal Acquisition Regulation Supplement (NFS).[52] The NFS provides additional processes that the Agency must go through in order to contract with a company.[53] The FAR and NFS both have requirements for how an agency must alert companies to contract bids, ensure competition among companies, and provide for a challenge system for companies whose bids are not accepted.[54] The FAR and NFS both allow companies to file protests before the GAO.[55] SAAs, however, are not subject to any of the FAR or NFS requirements.[56]

4. The COTS Program

NASA was able to decide which companies it wanted to work with under the COTS program.[57] Exploration Partners, which was not selected for the program, and Rocketplane Kistler (Rocketplane), filed challenges before the GAO.[58] The GAO decided that it did not have jurisdiction to review SAAs.[59] The GAO said that it would allow timely challenges if a company believed that an agency misused its OTA power.[60] The GAO held that NASA did have the authority to use SAAs for the COTS program.[61]

D. The GAO's Decision and Chevron *Deference*

When a reviewing body is tasked with determining whether an agency's interpretation of ambiguous language is valid, the agency's interpretation will be accepted as long as it is reasonable.[62] When deciding if an agency's interpretation is reasonable, the reviewing body will conduct the "*Chevron* two-step."[63] The first step is to see if the intent of Congress is

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[52] Gunasekara, *supra* note 1, at 896.

[53] *See id.* (explaining that the NASA Far Supplement (NFS) and the FAR force NASA to ensure it conducts its business in a certain way).

[54] *See* Schuman, *supra* note 8, at 279–80 (outlining NASA's obligation to business under the FAR and NFS).

[55] *Id.* at 280.

[56] *See id.* (showing the benefits of using a SAA).

[57] *See generally* Exploration Partners L.L.C., B-298804, 2006 U.S. Comp. Gen. LEXIS 211 (Comp. Gen. Dec. 19, 2006); Rocketplane Kistler, B-310741, 2008 U.S. Comp. Gen. LEXIS 10 (Comp. Gen. Jan. 28, 2008).

[58] *See generally Exploration Partners*, 2006 U.S. Comp. Gen. LEXIS 211; *Rocketplane Kistler*, 2008 U.S. Comp. Gen. LEXIS 10.

[59] *Exploration Partners*, 2006 U.S. Comp. Gen. LEXIS 211, at *8–9.

[60] *See id.* at *10 (showing that the GAO did decide that it would review an agency's use of OTA power if a company thought a procurement contract was required for a given situation).

[61] *See Rocketplane Kistler*, 2008 U.S. Comp. Gen. LEXIS 10, at *5 (holding that NASA did not need to use a procurement contract during the COTS program).

[62] Antonin Scalia, *Judicial Deference to Administrative Interpretations of Law*, 1989 DUKE L.J. 511, 511 (1989); *see also* Chevron, U.S.A., Inc. v. Nat'l Res. Def. Counsel, Inc., 467 U.S. 837, 843–45 (1984).

[63] *See* Thomas W. Merrill & Kristen E. Hickman, *Chevron's Domain*, 89 GEO. L.J. 833, 834 (2001) (explaining what questions a court would ask when engaging in the "*Chevron* two-step procedure").

clear.[64] If the court feels that Congress' intent is clear, then it must follow the intent of Congress and strike down the agency's interpretation.[65] If Congress' intent is unclear, however, the court moves on to step two.[66] The question then becomes if the agency's interpretation "is based on a permissible construction of the statute."[67] The decision is based on the idea that if Congress included ambiguous language in a statute, it intended it as a delegation to the agency.[68] When ambiguous language is present, the court cannot replace the agency's interpretation with its own, unless the agency's interpretation is arbitrary or capricious.[69] An interpretation is arbitrary or capricious when there is no rational connection between the agency decision and the relevant factors.[70]

E. When Does Chevron *Deference Apply?*

In addition to the "*Chevron* two-step," a court must first engage in "*Chevron* step-zero" to determine if *Chevron* deference applies to the situation at hand.[71] When first decided, *Chevron* deference was understood to apply only to agency interpretation of statutes.[72] A different form of deference applies when an agency makes interpretations through informal agency decisions.[73] *Skidmore* deference is weaker than *Chevron* deference and only requires courts to consult the agency interpretation and consider if it is "longstanding, consistent, and well-reasoned."[74] *Chevron* deference will be given to an agency action when that action flows from the use of formal procedures or is "based on . . . evidence of what Congress intended."[75]

F. Energy Conversion Devices: The GAO's First OTA Question

Energy Conversion Devices (ECD) was the first company to go

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[64] *See Chevron*, 467 U.S. at 842–43 (discussing the first analytic step to see if an agency will be given deference).

[65] *Id.*

[66] *See id.* at 843 (discussing what a court should do if Congressional intent is unclear).

[67] *Id.*

[68] *See id.* at 843–44 (explaining the thought process behind agency deference).

[69] *Id.* at 844.

[70] *See* Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 42–43 (1983) (explaining when a court can overturn an agency interpretation).

[71] *See* Cass R. Sunstein, *Chevron Step Zero*, 92 VA. L. REV. 187, 191 (2006) (explaining the changing attitude of the Supreme Court after the *Chevron* decision).

[72] *See* Scalia, *supra* note 62, at 511.

[73] Jim Rossi, *Respecting Deference: Conceptualizing Skidmore Within the Architecture of Chevron*, 42 WM. & MARY L. REV. 1105, 1118 (2001).

[74] *See* Skidmore v. Swift & Co., 323 U.S. 134, 140 (1944); Rossi, *supra* note 73, at 1117 (explaining that Skidmore deference is a form of "weak deference"); Sunstein, *supra* note 71, at 211 (suggesting courts would take into consideration agency interpretations if they were "longstanding, consistent, and well-reasoned").

[75] Sunstein, *supra* note 71, at 213–14.

before the GAO and question an agency's OTA power.[76] ECD was protesting its rejection by the Defense Advanced Research Projects Agency (DARPA).[77] DARPA issued a broad program that sought proposals for new film technology.[78] ECD's bid was rejected and the company filed a protest before the GAO "challenging the evaluation of the technical and cost proposals, the decision not to conduct discussions with the [bidding companies], and the decision" to not use a procurement contract for the project.[79] DARPA argued that the purpose of the program "was not to acquire goods [or] services[,]" but simply to advance the United States' technological capabilities.[80] ECD said that DARPA was only allowed to use OTA power "when the use of a standard [procurement] contract . . . [was] not feasible . . . ."[81] ECD was unable to show that the purpose of the program was to acquire goods and services "for the direct benefit of the [agency]."[82] This was the first time the GAO decided that it did not have the jurisdiction to review agreements that were made via OTA power.[83]

G. The GAO and Exploration Partners

The first SAA protest that the GAO received was from Exploration Partners.[84] When NASA announced the COTS program, it released certain specifications that the bidders had to meet.[85] Exploration Partners believed that it was the only company that could meet all of the program's requirements, and was surprised when NASA rejected its bid.[86] The company turned to the GAO.[87]

The GAO looked at the statutory language of the Space Act.[88] Since Congress listed both "contracts" and "other transactions" in the statute, Congress could not have intended them to mean the same thing.[89] NASA

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[76] Gunasekara, *supra* note 1, at 901–02; *see also* Energy Conservation Devices, Inc., B-260514, 1995 U.S. Comp. Gen. LEXIS 399, *1 (Comp. Gen. June 16, 1995).

[77] *See Energy Conservation Devices, Inc.*, 1995 U.S. Comp. Gen. LEXIS 399, at *1 (discussing why Energy Conversion Devices was before the GAO).

[78] *See id.* at *2 (explaining the project that Energy Conversion Devices wanted to be a part of).

[79] Gunasekara, *supra* note 1, at 902.

[80] *See Energy Conversion Devices, Inc.*, 1995 U.S. Comp. Gen. LEXIS 399, at *6 (explaining the Defense Advanced Research Projects Agency's (DARPA) rebuttal to Energy Conversion Devices' challenge).

[81] *See id.* at *7.

[82] *See id.* at *8 (explaining the GAO's decision).

[83] *See* Gunasekara, *supra* note 1, at 901–03 (providing the historical importance of the GAO's decision).

[84] *See id.* at 901–03 (examining the first three GAO OTA complaints in which the latter two were SAA complaints); *see also* Exploration Partners L.L.C., B-298804, 2006 U.S. Comp. Gen. LEXIS 211, at *3 (Comp. Gen. Dec. 19, 2006) (explaining that the GAO never received a challenge to NASA's OTA before).

[85] *See* Exploration Partners, 2006 U.S. Comp. Gen. LEXIS 211, at *4 (showing that the COTS program was specifically structured).

[86] *Id.* at *5.

[87] *See id.* at *1–2. (discussing Exploration Partners' decision to challenge NASA's decision).

[88] *Id.* at *7–9.

[89] *See id.* at *8 (discussing Congress's intent in drafting the Space Act).

argued that procurement contracts and SAAs are not the same thing.[90] The GAO had to decide whether NASA's use of its OTA power was an "award of [a] contract[] for the procurement of goods and services."[91] The GAO's analysis of the question began and ended with its look at the statute itself.[92] The GAO explained that "a cardinal principle of statutory construction" is to assume that "no clause, sentence, or word" in a statute is "superfluous, void, or insignificant."[93] Since Congress clearly separated "contracts" and "other transactions," they could not mean the same thing.[94] The GAO also told NASA that its OTA power was not unlimited.[95] The GAO explained that it would hear timely protests if a company believed that an agency was using its OTA power when it should have been using a procurement contract.[96]

H. The GAO and Rocketplane Kistler

The next time the GAO would hear a challenge about NASA's OTA power, the company would argue that NASA needed a government procurement contract to engage companies in the COTS program.[97] Rocketplane argued that the COTS program was for the direct benefit of NASA because the Agency was using the program as a way to conduct research and development.[98] NASA explained that the purpose of the COTS program was to encourage the growth of the commercial space industry in the United States.[99] NASA said that the program could not be about research and development because the Agency was not using any of the research from the participating companies.[100] The GAO decided that NASA's use of OTA power during the COTS program was permissible.[101]

I. The GAO and Competitiveness Concerns: The Case of Blue Origin

NASA's OTA power has found its way to the front page recently, as Blue Origin, a private space venture backed by Amazon founder Jeff Bezos, brought a challenge before the GAO, alleging that NASA behaved in an anti-competitive way.[102] NASA was selling a launch complex and decided

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[90] *See id.* at *8–9 (explaining that Congress separated "other transaction" and "contract," signaling a different meaning).

[91] *See id.* at *6 (explaining the main question the GAO had to decide).

[92] *See id.* at *8 (discussing how the GAO answered the key question in the case).

[93] *Id.*

[94] *See id.* (explaining how the GAO decided that SAAs and procurement contracts are not the same).

[95] *See id.* at *8–9 (holding that NASA's OTA power is limited).

[96] *Id.* at *10.

[97] Rocketplane Kistler, B-310741, 2008 U.S. Comp. Gen. LEXIS 10, at *4–5 (Comp. Gen. Jan. 28, 2008).

[98] *See id.* (showing Rocketplane's rationale in arguing that a procurement contract was required).

[99] *See id.* at *8 (discussing how the GAO answered the key question in the case).

[100] *Id*. at *8–9.

[101] *See id.* at *9–11 (holding that the use of SAAs for the COTS program was allowed because NASA did not acquire any goods or services).

[102] *See* Blue Origin, L.L.C., B-408823, 2013 U.S. Comp. Gen. LEXIS 252, at *17–21 (Comp. Gen. Dec. 12, 2013); Alan Boyle, *Billionaires' Battle for Historic Launch Pad Goes into Overdrive*, NBC

to accept bids from private space companies.[103] SpaceX won the bid.[104] Blue Origin explained that, while NASA had listed certain requirements in the bid announcement, NASA's Administrator had made public remarks about the bidding process that mentioned different requirements.[105] The GAO did not see a definitive preference that NASA manifested during the bidding process and thus gave deference to the Agency's interpretation of the bid announcement.[106]

III. NASA'S INTERPRETATION OF ITS OTA POWER AND THE GAO'S AUTHORITY TO REVIEW

A. A Look at NASA's OTA Power Through the Lens of Statutory Construction and Legislative History

When a statute's meaning is ambiguous, courts or other reviewing bodies look to the "language, structure, and history" of the statute to try and ascertain Congressional intent.[107] Section 202 of the Space Act enables NASA's Administrator "to enter into and perform such contracts, leases, cooperative agreements, or other transactions as may be necessary in the conduct of its work and on such terms as it may deem appropriate . . . ."[108] "[T]he most prominent [idea] of the role of courts [when it comes to] statutory construction [is to assume that] the judges are agents of the legislature."[109] Judges must apply legislative commands and trace their decisions back to an authoritative text.[110]

B. Should NASA's Interpretation of "Other Transaction Authority" Be Given Chevron *Deference?*

When ambiguous language is contained in an agency's governing statute, a reviewing court gives deference to the agency's interpretation of that language.[111] Even if NASA was interpreting language that was not in

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NEWS (Sept. 18, 2013, 10:15 PM), http://www.nbcnews.com/science/space/billionaires-battle-historic-launch-pad-goes-overtime-f8C11155810.

[103] *See* Boyle, *supra* note 102 (discussing the competing bids for launch pad 39A).

[104] Alan Boyle, *Space X Wins NASA's Nod to Take Over Historic Launch Pad 39A*, NBC NEWS (Dec. 13, 2013, 5:09 PM), http://www.nbcnews.com/science/space/spacex-wins-nasas-nod-take-over-historic-launch-pad-39a-f2D11741834.

[105] *See Blue Origin*, 2013 U.S. Comp. Gen. LEXIS 252, at *4 (discussing the anti-competitive behavior of NASA).

[106] *See id.* at *23 (holding that NASA's behavior was acceptable).

[107] *See* Cass R. Sunstein, *Interpreting Statutes in the Regulatory State*, 103 HARV. L. REV. 405, 414 (1989) (discussing the tools of statutory construction and interpretation).

[108] National Aeronautics and Space Act of 1958, 51 U.S.C. § 20113(e) (2014).

[109] Sunstein, *supra* note 107, at 415–16.

[110] *See id.* at 415 (discussing the relationship between the courts, legislature, and statutory interpretation).

[111] Scalia, *supra* note 62, at 511; *see also* Chevron, U.S.A., Inc., v. Nat'l Res. Def. Counsel, Inc., 467 U.S. 837, 843–45 (1984) (holding that an agency's interpretation of ambiguous language will likely be upheld by a reviewing court).

its governing statute, it still would be afforded deference by a reviewing body.[112] In NASA's case, the ambiguous language it is interpreting is the meaning of "other transaction".

1. Applying the *Chevron* Two-Step to NASA

Since NASA is an administrative agency, a *Chevron* analysis is required to determine if its interpretation of the Space Act is entitled to deference.[113] When an agency engages in interpretation, it is helpful to look at the legislative history.[114] One drafter of the Space Act remarked that he felt it was his job to give NASA all the power it required to make the United States preeminent in outer space activities.[115] The drafter also remarked that the phrase "other transaction" was used in order to cover everything else that was raised by the other drafters.[116] This is evidence of the broad power that Congress assumed the agency would need, and is likely how NASA decided that it could use OTA power in numerous ways. NASA can argue that its interpretation should be given *Chevron* deference because it flows from the intent of Congress that the power be broad.[117] This argument should get NASA past *Chevron* step zero.[118] It is also likely that a court will see "other transaction authority" as ambiguous language.[119] NASA satisfies step one of the "*Chevron* two-step."[120] Since NASA passes step one, as long as the Agency's interpretation is deemed permissible, a court will defer to the Agency and will not overturn the interpretation.[121]

2. The Space Act and Textual Canons

NASA also likely uses a contextual approach, meaning that the Agency not only looks to legislative history, but also to the structure of the statute itself.[122] When deciding how expansive its OTA power is, NASA

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[112] *See* Merrill & Hickman, *supra* note 63, at 836.

[113] *See Chevron*, 467 U.S. at 842–43 (discussing when an agency interpretation is entitled to judicial deference).

[114] *See* Sunstein, *supra* note 107, at 429 (explaining that looking at the legislative history of a statute may provide insight into why Congress included ambiguous language).

[115] *See* Dembling, *supra* note 12, at 211 (recalling the reasons why "other transaction" language was used in the Space Act).

[116] *See id.* (discussing what the drafters of the Space Act intended "other transaction" to mean and why it was phrased in that way).

[117] *See* Sunstein, *supra* note 71, at 190 (hypothesizing how NASA would argue that its interpretation of "other transaction" should be afforded *Chevron* deference).

[118] *See id.* at 191 (discussing that *Chevron* step zero requires a court to determine what kinds of agency interpretations are afforded *Chevron* deference).

[119] *See id.* at 190–91 (explaining that courts will see if Congress has spoken clearly on the issue at hand).

[120] *See* Sunstein, *supra* note 71, at 190–91 (explaining that step one of the "*Chevron* two-step" requires a court to ask whether the intent of Congress is clear).

[121] *Id.*

[122] *See* Sunstein, *supra* note 107, at 424–26 (explaining the contextual approach).

likely applies textual canons.[123] Textual canons can provide the Agency with general rules for understanding the actual text of the statute.[124] The most basic textual canon is the plain meaning rule.[125] This requires the agency to look at the actual meaning of the words in the statute.[126] NASA used the plain meaning rule when arguing that the GAO did not have the jurisdiction to take up Exploration Partners' bid protest.[127]

More in-depth textual canons include *noscitur a sociis* and *ejusdem generis*.[128] These Latin phrases translate to "it is known by its associates" and "of the same kind or class[,]" respectively.[129] NASA would look to the surrounding text of the statute to determine what "other transaction" is applicable to.[130] NASA would cite Section 203 of the Space Act's list of powers granted to the Administrator: "enter into . . . contracts, leases, cooperative agreements, [or] other transactions[.]"[131]

NASA could apply *noscitur a sociis* and argue that the drafters intended the Agency's OTA power to allow the Agency to enter into agreements with companies. Since the drafters placed the "other transaction" phrase after "contracts, leases, and cooperative agreements," NASA could argue that "other transaction" should be understood through the words with which it is surrounded.[132] "Other transaction" would be "known by its associates" and would apply to entering into agreements. If a word or sentence has no real significance taken alone, *noscitur a sociis* allows for a court to imply significance from its use and placement in connection with the specific statute.[133] Words cannot be taken out of the statute and be interpreted in isolation.[134] Words are placed together in a statute for a deliberate reason, and therefore, must be interpreted together.[135]

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[123] *See id.* at 452–53 (describing textual canons as useful tools to help agencies and courts determine Congressional intent).

[124] *See id.* (explaining how textual canons can be useful to agencies and courts when they engage in statutory interpretation).

[125] *See id.* at 410 (discussing that the plain meaning rule requires agencies or courts to look at the words of the statute to determine Congressional intent).

[126] Caminetti v. United States, 242 U.S. 470, 485 (1917) (holding that when the language of a statute cannot possibly mean more than one thing, the intent of Congress is clear); *see also* Sunstein, *supra* note 107, at 410 (explaining the steps that an agency or court would follow when using the plain meaning rule).

[127] *See* Exploration Partners L.L.C., B-298804, 2006 U.S. Comp. Gen. LEXIS 211, at *8–9 (Comp. Gen. Dec. 19, 2006) (holding that the intent of Congress was clear).

[128] *See* John F. Manning, *The Absurdity Doctrine*, 116 HARV. L. REV. 2387, 2466 n.285 (2003) (discussing additional textual canons that a court or agency could use).

[129] *See id.* (explaining what the ideas behind *noscitur a sociis* and *ejusdem generis* are, respectively).

[130] *See id.* (providing an explanation of how a court or agency could look to the surrounding language in a statute to try to ascertain the intent of Congress).

[131] National Aeronautics and Space Act of 1958, 51 U.S.C § 20113(e) (2014).

[132] *See* Manning, *supra* note 128, at 2466 n.285 (providing an example of how a court would utilize *noscitur a sociis*).

[133] *See generally* 73 AM. JUR. 2d *Statutes* § 125 (2013) (explaining that a court could put words together to help find Congressional intent).

[134] *Id.*

[135] *See id.* (remembering there is always a reason why words are placed together).

NASA could also apply *ejusdem generis* to argue the intent of the drafters. This canon would require a court to read "other transaction" in light of the words associated with it.[136] The court would not read "other transaction" to mean things that lacked relevant similarity to the words that surround it in the statute.[137] The court would ascertain what Congress was aiming to say by placing "other transaction" amongst contracts, leases, and agreements, and would not interpret "other transaction" to apply to things that lacked similarity to contracts, leases, and agreements.[138] This would be a good argument for NASA, as using OTA power to grant SAAs is related to the purposes of entering into contracts, leases, and agreements. NASA should be aware, however, that the legal environment is shifting away from textual canons.[139]

3. The Text of the Space Act Itself

Textualism would provide the Agency with another way to interpret its OTA power broadly.[140] Textualism looks at the language in the statute itself.[141] If a court can apply its own interpretation through legislative history, it usurps power from the legislative branch because the law that Congress passed could be overridden.[142]

Textualists also believe that if the agency were held to the language in the statute itself, companies that were regulated by it would be better suited to prepare for challenges; everyone has access to the language, whereas not everyone has access to or knows how to find legislative history.[143] NASA, however, would argue that textualist review is inadequate because the meaning of words is based on cultural and contextual understanding.[144] The words in a statute depend on the context in which Congress wanted them to be understood.[145] If words are only taken at their dictionary definition, without regard for context or legislative history, some

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[136] *See* Manning, *supra* note 128, 2466 n.285 (explaining what using the textual canon *ejusdem generis* entails).

[137] *See id.* (hypothesizing that a court would read "other transition" to mean something similar to the words that surround it in the Space Act).

[138] *See id.* (describing a hypothetical court not interpret a prohibition on animals in a park to apply to humans due to lack of similarity).

[139] *See, e.g.*, Sunstein, *supra* note 107, at 415–16 (warning that textual canons may not be as useful for statutory interpretation because of the seemingly endless supply of them).

[140] *See id.* at 416 (providing an additional way for NASA to interpret its OTA in a broad way).

[141] *Id*. at 415–16.

[142] *See* William Eskridge, Jr., *The New Textualism*, 37 UCLA L. REV. 621, 649 (1990) (discussing how legislative history can actually give power to certain branches of government that the Constitution did not intend).

[143] *See* Sunstein, *supra* note 107, at 416 (explaining the policy implications of allowing courts and agencies to use legislative history during statutory interpretation).

[144] *See id.* (suggesting that NASA would agree with the author of the Sunstein article because both would argue that words alone would not show what the intent of Congress really was when it granted NASA "other transaction" authority).

[145] *See id.* at 416–17 (explaining that words need to be read in the way that Congress intended them to be read).

problems may arise.[146] The interpreting court may be too lenient with the definition, leading to an over-inclusiveness that Congress never intended the statute to have.[147]

This phenomenon has an opposite approach also, the possibility of under-inclusiveness.[148] A court could interpret a word too closely and miss that the purpose of the statute went far beyond the common meaning of the word.[149] These examples highlight that statutes are a mixture of text and purpose. Congress can leave gaps in statutes to let an agency or the courts make the law.[150] This allows Congress to pass general statutes and let bodies that have expertise in a particular area make the statute more specific.[151] If the statute is purposely left open-ended, textualism fails because the very premise of the idea is uprooted.[152] Courts need to look to other things when the law is broad.[153] This is the scenario that NASA faces; a broad statute that Congress left semi-open-ended, so that the Agency could grow and adapt.[154] A purely textualist approach to NASA's OTA power would not be as helpful as one looking to the legislative history or applying textual canons.[155]

C. The GAO's Decision not to Review SAAs: Why NASA Won

The Competition in Contracting Act of 1984, and the GAO's own bid protest regulations, tell the GAO what it can and cannot review.[156] Generally, the GAO can review awards of contracts by agencies for the procurement of goods and services.[157] The GAO has decided that SAAs are not contracts for the procurement of goods and services and are therefore

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[146] *See id.* at 418–22 (discussing the problems that may arise if courts read words only by their dictionary meaning and paid no regard to what Congress actually intended them to mean).

[147] *See id.* at 419 (providing an example of a town's statute that banned vehicles in a park but the town then built a World War II monument involving tanks and explaining that an over inclusive textualist approach would lead a court to find that the monument was in violation of the statute).

[148] *See id.* at 420–21 (explaining that courts may fear interpreting a statute too broadly and would hold that a statute does not apply to a situation that Congress actually intended it to apply to).

[149] *See id.* at 420–22 (explaining that under inclusiveness could have a profound effect on how a statue is enforced).

[150] *See id.* at 421–22 (discussing how Congress frequently leaves statutes open-ended when it wants to delegate lawmaking power).

[151] *See id.* at 421 (analyzing why Congress decides to leave statutes open ended).

[152] *See id.* at 421–22 (discussing that the entire thought process behind textualist review is not applicable to a statute that Congress intentionally left open ended).

[153] *See id.* at 422 (explaining why textualism fails when Congress leaves a statute intentionally open ended).

[154] *See* Dembling, *supra* note 12, at 211 (recalling the reasons why the drafters wanted the Space Act to be broad).

[155] *See id.* (opining that the Space Act was left intentionally broad and ambiguous by Congress).

[156] *See* Competition in Contracting Act of 1984, 31 U.S.C. § 3553(a) (2012); *see also* Exploration Partners L.L.C., B-298804, 2006 U.S. Comp. Gen. LEXIS 211, at *6 (Comp. Gen. Dec. 19, 2006) (discussing the jurisdiction of the GAO in regards to government procurement contracts and SAAs).

[157] *Exploration Partners*, 2006 U.S. Comp. Gen. LEXIS 211, at *6 (explaining that the GAO typically only has jurisdiction to review government procurement contracts that result in the government obtaining goods or services).

outside of the GAO's bid protest jurisdiction.[158] Once a formal protest is filed before the GAO dealing with a procurement contract, there is an automatic stay provision that prevents the contract from being awarded until the GAO has ruled on the matter.[159]

The GAO explained that "an . . . agency must use a procurement contract when . . . the . . . purpose of the [contract] is to acquire . . . property or services for the direct benefit or use of the United States Government . . . or . . . [if] the agency decides . . . that a procurement contract is appropriate."[160] The GAO explained that the COTS program was not about NASA obtaining any goods or services.[161]

The question that Rocketplane and Exploration Partners must be wondering is when exactly NASA is obtaining goods or services.[162] Had a third company brought a protest before the GAO, they should frame their argument much like Rocketplane did.[163] Even though the COTS announcement did not contain a request for the procurement of vehicles, the announcement did make clear that the program was intended to eventually lead to a contract with NASA to service the ISS.[164] A retroactive look at the COTS program shows that NASA did intend to obtain a vehicle because NASA was no longer developing a spacecraft of its own.[165] Once NASA was told that it would not be given the money to develop a ship of its own, the Agency quickly made the COTS program its avenue to get back to space.[166] The problem here for Exploration Partners and Rocketplane is that their decisions were handed down in 2006 and 2008 respectively.[167] President Obama did not force NASA to cancel its spacecraft development until 2010.[168] If the COTS program were to be re-administered today, there

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[158] *See id.* at *8–9 (holding that the GAO does not have jurisdiction to review SAAs because there is no exchange of goods or services).

[159] Gunasekara, *supra* note 1, at 900.

[160] *Exploration Partners*, 2006 U.S. Comp. Gen. LEXIS 211, at *10.

[161] *See id.* at *5 (observing that NASA did not obtain any vehicles during the COTS program).

[162] *See* Rocketplane Kistler, B-310741, 2008 U.S. Comp. Gen. LEXIS 10, at *9 (Comp. Gen. Jan. 28, 2008) (holding that there was no need for a government procurement contract since NASA did not obtain any goods or services).

[163] *See, e.g.*, *id.* at *4–5 (arguing that NASA did obtain vehicles via the COTS program and should have used a government procurement contract).

[164] *See id.* at *3 (citing that the COTS announcement foresaw the potential for NASA to acquire a spacecraft).

[165] *See* Tariq Malik, *NASA Grieves Over Canceled Program*, NBC NEWS (Feb. 2, 2010, 10:12 PM), http://www.nbcnews.com/id/35209628/ns/technology_and_science-space/t/nasa-grieves-over-canceled-program/ (explaining that President Obama's 2010 budget directed NASA to cancel its efforts to build the new vehicles).

[166] *See* Kenneth Chang, *Obama Calls for End to NASA's Moon Program*, N.Y. TIMES (February 1, 2010), http://www.nytimes.com/2010/02/02/science/02nasa.html?_r=0 (discussing how NASA's plan shifted from developing a new spacecraft to using private space companies and other countries to ferry cargo and astronauts to and from the International Space Station).

[167] *See generally* Exploration Partners L.L.C., B-298804, 2006 U.S. Comp. Gen. LEXIS 211, at *6 (Comp. Gen. Dec. 19, 2006); *Rocketplane Kistler*, 2008 U.S. Comp. Gen. LEXIS 10.

[168] *See* Chang, *supra* note 166 (showing that President Obama's 2010 budget proposal asked for $18 billion over five years, but only for new types of engines and for refueling technologies).

is little doubt that the purpose of the program would be for NASA to have access to a new spacecraft.[169] The GAO said that, since NASA was not using any of the vehicles from the program, there was no research or development on the Agency's behalf.[170] The only way NASA can reach the ISS today is by using the vehicles that SpaceX and Orbital Sciences developed during the COTS program.[171] This demonstrates that COTS did provide NASA with goods and services that directly benefited the Agency.[172]

D. Was The GAO Right?: Why Its Decision not to Review Leads to Anti-Competitive Concerns

The GAO's decisions are harmful to the private space industry because they allow NASA to use the private sector as a research and development hub.[173] NASA outlined the COTS program in its Human Spaceflight Transition Plan.[174] NASA believed that the program would allow the Agency to work with private space companies and have them prove their ability to service the ISS.[175] NASA said that the purpose of the COTS program was to implement policies that would allow the Agency to invest in the commercial space industry "with the goal of achieving safe, reliable, cost effective [sic] access to . . . orbit . . . ."[176] One could read NASA's goals as proving that the Agency was, in fact, using the companies who were chosen for the COTS program to research and develop a new space vehicle that NASA could use.[177] The COTS program did result in NASA obtaining new space vehicles that it uses to service the ISS.[178] While

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[169] *See generally id.* (showing that NASA was asking Congress to approve funds so it could work with private space companies).

[170] *See Rocketplane Kistler*, 2008 U.S. Comp. Gen. LEXIS 10, at *8–9 (holding that since NASA did not obtain any vehicles directly from the COTS program it was not required to use a government procurement contract).

[171] *See Cargo Ship Cygnus Leaves International Space Station*, THE GUARDIAN (Feb. 18, 2014), http:// theguardian.com/science/2014/feb/18/cargo-ship-cygnus-leaves-international-space-station.

[172] This is in direct opposition to the argument NASA made in Rocketplane. *See Rocketplane Kistler*, 2008 U.S. Comp. Gen. LEXIS 10, at *7–8 (citing NASA's argument that the COTS program would result in no vehicles that NASA would use).

[173] *See generally* Exploration Partners L.L.C., B-298804, 2006 U.S. Comp. Gen. LEXIS 211, at *6 (Comp. Gen. Dec. 19, 2006); *Rocketplane Kistler*, 2008 U.S. Comp. Gen. LEXIS 10.

[174] *See* NASA, HUMAN SPACEFLIGHT TRANSITION PLAN 23 (2006), *available at* http://www.nasa.gov/pdf/315546main_space_flight_transition_plan.pdf (outlining NASA's plan for the COTS program and the future of the agency's spaceflight plan).

[175] *See generally id.* (showing that the Agency did anticipate working with private companies to replace the Space Shuttle).

[176] Kelso, *supra* note 35, at 3.

[177] *See* Miriam Kramer, *Cygnus vs. Dragon: How Two Private Spaceships Measure Up*, NBC NEWS (Sept. 17, 2013, 1:38 PM), http://www.nbcnews.com/science/space/cygnus-vs-dragon-how-two-private-spaceships-measure-f4B11185252 (proving that NASA did obtain vehicles from the COTS program).

[178] *See id.* (showing that SpaceX and Orbital Sciences are currently servicing the International Space Station).

the COTS program has been successful for SpaceX[179] and Orbital Sciences,[180] businesses that were not chosen to participate have no avenue to challenge NASA's decision.[181] Preparing a COTS bid is expensive, and when NASA decides against a bid, that company faces severe financial hardship.[182] The COTS program is now over, and NASA is looking to the next phase of commercial space flight.[183] The CCiCAP program will apply the COTS model, but will focus on human spaceflight instead of cargo spaceflight.[184] NASA has already decided that it will be using SAAs to partner with companies for CCiCAP.[185] The program is already underway.[186] NASA expects CCiCAP to continue until 2014.[187]

NASA also has plans for the next phase of CCiCAP, the Commercial Crew Transportation Capability (CCtCap) phase.[188] CCtCap contains an interesting decision by NASA; the use of a government procurement contract instead of an SAA.[189] A company that is awarded a procurement contract via CCtCap will be allowed to transport NASA astronauts to and from the ISS.[190] If CCtCap existed during the COTS program, it would have provided Exploration Partners and Rocketplane with an example to prove that NASA could have used a typical government procurement contract when working with private space companies.[191] While it may be too late for the failed COTS companies, if a failed CCtCap

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[179] *See* Press Release, John Yembrick & Josh Byerly, NASA Awards Space Station Commercial Resupply Services Contracts, NASA (Dec. 23, 2008), http://www.nasa.gov/home/hqnews/2008/dec/HQC08-069ISSResupply.html (showing that NASA and SpaceX signed a $1.6 billion contract).

[180] *See id.* (showing that NASA and Orbital Sciences signed a $1.9 billion contract).

[181] *See* Rocketplane Kistler, B-310741, 2008 U.S. Comp. Gen. LEXIS 10, at *9 (Comp. Gen. Jan. 28, 2008) (explaining that the GAO decided that it did not have the jurisdiction to review the rejected bids from the COTS program).

[182] *See* Jeff Froust, *Farewell, Rocketplane*, NEWSPACE JOURNAL (July 7, 2010, 8:56 PM), http://www.newspacejournal.com/2010/07/07/farewell-rocketplane/ (showing that Rocketplane went bankrupt after its failed COTS bid).

[183] *See* Jeff Froust, *Life After COTS*, THE SPACE REVIEW (Nov. 18, 2013), http://www.thespacereview.com/article/2406/1 (reviewing the COTS program and looking forward to NASA's next steps).

[184] *See* McAlister, *supra* note 43, at 2 (providing a comparison between the COTS program and the CCiCAP program).

[185] Memorandum from David Shreve, Agreements Officer, NASA, to All Prospective Participants (Feb. 7, 2012) *available at* https://prod.nais.nasa.gov/eps/eps_data/149848-SOL-001-001.pdf.

[186] *See* Dan Leone, *Boeing, SpaceX and Sierra Nevada Stay in Race for Commercial Crew*, SPACE NEWS (Aug. 3, 2012), http://www.spacenews.com/article/boeing-spacex-and-sierra-nevada-stay-race-commercial-crew (providing an overview of NASA's new CCiCAP program and explaining that NASA has already invested nearly one billion dollars in three companies).

[187] *See* Dan Leone, *NASA Orders More Development Work Under Commercial Crew Contracts*, SPACE NEWS (August 26, 2013), http://www.spacenews.com/article/civil-space/36943nasa-orders-more-development-work-under-commercial-crew-contracts.

[188] *See* Yves–A. Grondin, *NASA Outlines its Plans for Commercial Crew Certification*, NASA SPACEFLIGHT.COM (Aug. 5, 2013), http://www.nasaspaceflight.com/2013/08/nasa-outlines-plans-commercial-crew-certification/ (discussing NASA's new program and its goals).

[189] *See id.* (discussing that NASA decided to use a government procurement contract for the CCtCap program).

[190] *See id.*

[191] *See generally* Exploration Partners L.L.C., B-298804, 2006 U.S. Comp. Gen. LEXIS 211 (Comp. Gen. Dec. 19, 2006); Rocketplane Kistler, B-310741, 2008 U.S. Comp. Gen. LEXIS 10 (Comp. Gen. Jan. 28, 2008).

company wanted to bring a challenge it would be interesting to see if the GAO addressed the difference between CCtCap and COTS when rendering its decision, or whether the GAO would simply address CCtCap and ignore the COTS program. If the GAO had to explain the difference between CCtCap and COTS, it could only discuss how one used SAAs and the other used procurement contracts.[192] Based on NASA's predictions for the program, at least a few companies vying for a CCtCap contract will be rejected.[193] While NASA is working with three companies under CCiCAP, it predicts that it will only be able to offer CCtCap contracts to two of them.[194] By allowing NASA to use its OTA power basically unchecked,[195] the GAO has created an environment that is anti-competitive and harmful for business.[196] The FAR exists to prevent the government from acting in an anti-competitive manner.[197]

The different paths that a company can take after rejection vary drastically, depending on if a government procurement contract was utilized. The GAO has reviewed government procurement contracts between NASA and private space companies before.[198] The breadth of the GAO's decision in a matter dealing with a procurement contract compared with an SAA is astounding.[199] The GAO includes a detailed discussion about every factor the company challenging the award feels is unreasonable.[200] At least PlanetSpace, the company that challenged NASA's procurement contract with Orbital Sciences, got an explanation of where its bid went awry.[201] Exploration Partners and Rocketplane were never told why their bids were rejected.[202] Since PlanetSpace was challenging a procurement contract and

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[192] *Compare* Exploration Partners, 2006 U.S. Comp. Gen. LEXIS 211, at *1–12 (examining the case under a SAA) *with* Grondin, *supra* note 188 (stating that CCtCap will use a procurement contract).

[193] *See* Grondin, *supra* note 188 (showing that there will be companies that will be rejected from NASA's latest program).

[194] *See id.* (predicting there will be at least one company who could challenge NASA's rejection of its bid for the CCtCap program).

[195] *See Rocketplane Kistler*, 2008 U.S. Comp. Gen. LEXIS 10, at *5 (holding that the GAO could not review NASA's rejection of COTS program bids because they were not subject to the GAO's jurisdiction).

[196] *See id.* (providing an example of two companies that were never told why their bids were denied by NASA); *see also* Blue Origin, L.L.C., B-408823, 2013 U.S. Comp. Gen. LEXIS 252, at *5 (Comp. Gen. Dec. 12, 2013) (providing an example of a company who was unable to submit a competitive bid because NASA did not provide clear guidelines about the bidding process).

[197] *See* Gunasekara, *supra* note 1, at 896.

[198] PlanetSpace Inc., B-401016; B-401016.2, 2009 U.S. Comp. Gen. LEXIS 90, at *3 (Comp. Gen. Apr. 2009) (providing an example of the GAO reviewing a NASA procurement contract).

[199] *See generally id.* at *10–17 (showing the different analytic techniques that the GAO uses when reviewing a government procurement contract as opposed to an SAA).

[200] *See generally id.* at 18–39 (citing the in-depth discussion the GAO engages in when it determines whether NASA acted accordingly during a project that was governed by a government procurement contract).

[201] *See generally id.* (showing that the GAO provided a step by step comparison of PlanetSpace's bid with other bids that NASA did not reject).

[202] *See generally* Exploration Partners L.L.C., B-298804, 2006 U.S. Comp. Gen. LEXIS 211 (Comp. Gen. Dec. 19, 2006); Rocketplane Kistler, B-310741, 2008 U.S. Comp. Gen. LEXIS 10 (Comp. Gen. Jan. 28, 2008).

exhausted all of its administrative remedies, the Administrative Procedure Act (APA) allows the company to file suit in Federal Court.[203] PlanetSpace took advantage of this power and sought declaratory and injunctive relief from NASA.[204] The court forced NASA to explain the reasons why it rejected PlanetSpace's bid.[205] While the company did not get any monetary relief from NASA,[206] this is a good example of the rights that companies have under a procurement contract, and shows how limited rights are for companies under a SAA. Rocketplane's only court appearance was to decide which employees were entitled to severance payments after the company declared bankruptcy.[207]

IV. THE FUTURE OF COMMERCIAL SPACE FLIGHT: WHY NASA SHOULD CONSIDER SOME TYPE OF APPEALS PROCESS

A. A Look at how Other Agencies with OTA Power Work with Private Companies

While NASA was the first government agency to receive OTA power, it was not the last.[208] As the center of innovation shifted from the government to the private sector,[209] Congress recognized the need for additional agencies to have OTA power. Unlike NASA, the Department of Defense, Department of Transportation, and the Department of Homeland Security are allowed to use their OTA power for research and development agreements.[210] The Department of Defense was given a stronger OTA power because Congress wanted to ensure that the United States would have access to the most current technologies in the defense arena.[211]

Some of these other agencies actually have checks on their OTA power.[212] The GAO must provide annual reports to Congress detailing the

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[203] *See* 28 U.S.C. § 1491(b)(1) (2012) (explaining that the statute contains a Sunset Provision that removes the authority of District Courts to hear these kinds of suits).

[204] *See generally* PlanetSpace, Inc. v. United States, 92 Fed. Cl. 520, 525–26 (Fed. Cl. 2010) (providing an example of the rights a company has under a government procurement contract).

[205] *Id.* at 549.

[206] *Id.* at 526, 549.

[207] *See* Trafton v. Rocketplane Kistler, Inc., No. 08–C–99, 2010 U.S. Dist. LEXIS 18955, at *4–18 (E.D. Wis. Mar. 2, 2010) (showing that Rocketplane did get to appear in court but only to decide which employees were entitled to payment after the company declared bankruptcy).

[208] *See generally* L. ELAINE HALCHIN, CONG. RESEARCH SERV., RL34760, OTHER TRANSACTION (OT) AUTHORITY 5–6 (2011) (showing that Congress eventually granted OTA power to the Department of Defense, Federal Aviation Administration, Department of Transportation, Transportation Security Administration, Department of Homeland Security, Department of Health and Human Services, National Institutes of Health, and the Department of Energy).

[209] *See* Dix et al., *supra* note 2, at 25–26.

[210] *Id.* at 23–24.

[211] *See id.* at 26 (showing an example of an agency whose OTA is stronger than NASA's and the reasons why Congress wanted that agency to have strong OTA).

[212] *See* HALCHIN, *supra* note 208, at 11, 15, 17 (explaining the power restraints on the Secretary of Defense, the Secretary of Homeland Security, and the Secretary of Energy).

Department of Homeland Security's use of its OTA power.[213] The Department of Health and Human Services can use its OTA power in connection with a specific program that conducts research for the National Institutes of Health.[214] The Secretary of Energy must use competitive and merit-based selection procedures when using OTA power.[215] The Secretary of Energy must also provide a written determination detailing why a government procurement contract was not feasible for a specific program.[216] The Department of Defense and the Department of Homeland Security must submit information about their respective uses of their OTA authority to the Federal Procurement Data System (FPDS).[217] FPDS is a government-wide database that tracks agencies' contract actions and is available to the public.[218] The Department of Defense's OTA power is also only available to "carry out prototype projects that are directly relevant to weapons or weapons systems proposed to be acquired or developed by the Department . . . ."[219] The Department of Defense and the Department of Homeland Security each claim that OTA power greatly reduces the typical cost of a government procurement contract, yet neither agency has supplied actual figures detailing the savings and cost effectiveness of OTA agreements.[220]

A large problem with OTA power is the lack of uniform guidelines regarding the applicability of statutes to OTAs.[221] Since agencies can really tailor their OTA power to best fit that agency's need, it is difficult to monitor OTA power.[222] It is equally difficult to evaluate the benefits of OTA power.[223] While many agencies have OTA power, none of them use it in the same way.[224] Since so many agencies use it differently, there is no real way to compare OTA and typical government contracts.[225]

Congress would be wise to mandate data collection to all agencies with OTA power.[226] This would provide a way to compare OTA power and

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[213] *See id.* at 15 (providing an example of a limit on an agency's OTA).

[214] *Id.* at 17.

[215] *See id.* (explaining that some agencies need to ensure that all of their projects meet certain requirements that are aimed to keep the process competitive and fair).

[216] *Id.*

[217] *See id.* at 23 (showing that there is a system that aims to track agency use of OTA).

[218] *See id.* (explaining that a business could use this program to see how past projects utilized OTA).

[219] Gregory J. Fike, *Measuring "Other Transaction" Authority Performance Versus Traditional Contracting Performance: A Missing Link To Further Acquisition Reform*, 2009 ARMY LAW. 33, 37 (2009) (citations omitted) (internal quotation marks omitted).

[220] *See id.* at 40–41(showing that there is no evidence to show that government procurement contracts are more expensive).

[221] HALCHIN, *supra* note 208, at 22.

[222] *See id.* at 23 (showing that it is difficult to measure how each agency uses its OTA since each agency's OTA is different).

[223] *See id.* at 23–28.

[224] *See id.* (showing the differences in how agencies are allowed to use their OTA).

[225] *See generally* Fike, *supra* note 219, at 43 (proving that it is difficult to compare government procurement contracts and agreements governed by OTA power).

[226] *See id.* at 42–43 (explaining how Congress can help bring clarity to the OTA power quandary).

government procurement contracts on different factors.[227] Congress would be able to see if OTA power is more cost-effective, the amount of time each process takes, and see if companies were more successful under an OTA agreement or a government procurement contract.[228] Congress has actually taken steps to help regulate NASA's OTA power.[229] House Bill 2687 would force NASA to make significant changes to its SAA regime.[230] Senate Bill 1317 proposes that NASA use only government procurement contracts when working with private companies.[231] These bills, while not yet law, are an excellent step towards regulation of NASA's OTA power.

NASA should look to how other agencies provide for some sort of review through their OTA power. The Department of Energy's requirement that its secretary provide a written determination for why a typical government procurement contract is not required would be a good start.[232] By forcing the Agency to provide a written determination in each specific instance, it forces the Agency to take a hard look approach rather than simply rejecting a bid. Forcing NASA to tell each company why an SAA is required would lead to the GAO catching NASA using its OTA power in an inappropriate way. The differences between COTS, CCiCAP, and CCtCap seem to be slim, yet NASA decided to use SAAs for two of them while using procurement contracts for CCtCap.[233] If NASA were forced to explain its decisions for using SAAs, perhaps all three programs would have used the same method of acquisition.

Forcing NASA to log SAAs in the FPDS would be helpful to business. Since this database is open to the public, companies could log onto the system and get a general idea of how NASA has weighed bids in the past. Companies could determine whether or not a bid could be in their best interest before investing hundreds of millions of dollars into a bid that NASA would reject.

B. Why Reviewing Its OTA Power Is Also in NASA's Best Interest

If NASA is really trying to foster the growth of the private space industry in the United States, it should try to provide a more fair work

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[227] *See generally id.* (discussing what Congress's help could lead to).

[228] *See generally id.* (explaining what questions could be answered by Congress's action).

[229] *See generally* National Aeronautics and Space Administration Authorization Act of 2013, H.R. 2687, 113th Cong. § 707 (2013) (proposing certain changes to NASA's SAA practice); National Aeronautics and Space Administration Authorization Act of 2013, S. 1317, 113th Cong. § 224 (2013) (proposing that NASA use government procurement contracts in the future instead of SAAs).

[230] *See* H.R. 2687 § 707 (forcing NASA to submit annual reports to Congress detailing the Agency's SAA practices over the previous fiscal year).

[231] *See* S. 1317 § 224(a)–(c) (explaining that NASA should use fair, open, and well-defined government procurement contracts in the future when it works with private companies).

[232] *See* HALCHIN, supra note 208, at 27.

[233] *See* Grondin, *supra* note 188 (explaining that NASA chose to use a procurement contract for CCtCap).

environment. If someone were debating which path to take with their new space company, one would think that they would always want to partner with NASA. After these GAO decisions,[234] that person may opt instead to follow in the footsteps of Richard Branson[235] and Robert Bigelow.[236] Both own companies capable of space flight and neither worked with NASA. These companies are planning to send private passengers on suborbital flights in the near future.[237] Robert Bigelow's company has already placed private space stations into orbit with plans to open a space hotel in the coming years.[238] Seven hundred people have signed up for flights on Branson's Virgin Galactic,[239] and Mars One, a company attempting to send humans to Mars, received over 10,000 applications.[240] The success of these companies proves that the public is interested in space tourism.

It is actually a common misconception that NASA is the only agency that regulates space. If a business was unhappy with NASA's past behavior, there are other agencies that the business could work with to enter the space market. The Federal Aviation Administration (FAA) and the Department of Commerce each have expansive jurisdiction when it comes to space.[241] The FAA has stated that its jurisdiction in space flight could increase.[242] The FAA even has the jurisdiction to launch commercial objects into space.[243]

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[234] *See* Exploration Partners L.L.C., B-298804, 2006 U.S. Comp. Gen. LEXIS 211 (Comp. Gen. Dec. 19, 2006); Rocketplane Kistler, B-310741, 2008 U.S. Comp. Gen. LEXIS 10 (Comp. Gen. Jan. 28, 2008).

[235] *See* Alan Boyle, *SpaceShipOne Wins $10 Million X Prize*, NBC NEWS, http://www.nbcnews.com/id/6167761/ns/technology_and_science-space/t/spaceshipone-wins-million-x-prize/ (last updated Oct. 5, 2004, 2:58 AM) (reporting on the successful launch of Spaceship One).

[236] *See* Stephen Clark, *Successful First Step for Bigelow's Plans in Space*, SPACEFLIGHT NOW (Aug. 25, 2006), http://www.spaceflightnow.com/news/n0608/25bigelow/ (discussing the successful launch and operation of Bigelow Aerospace's first inflatable space module).

[237] *See* Douglas Messier, *Private Spaceships for Space Tourists to Launch Big Test Flights*, SPACE.COM (May 23, 2013), http://www.space.com/21278-space-tourist-space-planes-launching.html (reporting on the growth of the private space industry).

[238] *See* Adam Higginbotham, *Robert Bigelow Plans a Real Estate Empire in Space*, BLOOMBERG BUSINESSWEEK (May 2, 2013), http://www.businessweek.com/articles/2013-05-02/robert-bigelow-plans-a-real-estate-empire-in-space (reporting on Bigelow's plans to open private space hotels and private space stations).

[239] Louise Armitstead, *Branson Ready for Lift Off with 700 Space Tickets Sold*, THE TELEGRAPH (Sept. 18, 2013, 6:39 PM), http://www.telegraph.co.uk/finance/newsbysector/transport/10319028/Branson-ready-for-lift-off-with-700-space-tickets-sold.html.

[240] *See* Ben Brumfield & Elizabeth Landau, *A One-Way Ticket to Mars, Apply Now*, CNN, http://www.cnn.com/2013/04/22/world/mars-one-way-ticket/ (last updated Aug. 9, 2013, 12:03 PM) (showing that some members of the public are willing to travel to Mars with no way to return).

[241] *See About the Office*, FAA, http://www.faa.gov/about/office_org/headquarters_offices/ast/about/ (last visited Dec. 12, 2014) (outlining the jurisdiction of the FAA's space office); *Office of Space Commercialization*, SPACE COMMERCIALIZATION, http://www.space.commerce.gov/policy/national-space-transportation-policy/ (last visited Mar. 3, 2015) (discussing the jurisdiction of the DOC's space commercialization office).

[242] *See* Joanne Irene Gabrynowicz, *One Half Century And Counting: The Evolution of U.S. National Space Law And Three Long-Term Emerging Issues*, 4 HARV. L. & POL'Y REV. 405, 421 (2010) (explaining how Congress has granted the FAA with incremental jurisdiction to license commercial space flights since 1984).

[243] *Id.*

NASA needs to recognize that it cannot keep treating businesses unfairly. The private space flight industry is at its infancy, and no one truly knows what tomorrow will bring.[244] The "evolving definition of . . . commercial" is one of the three long-term issues facing the space industry today.[245] NASA's Administrator should try to implement some type of review process or create a policy memo detailing the Agency's new method of providing businesses with access to past OTA behavior and specific determinations of why OTA power is required in specific circumstances.

V. CONCLUSION

While NASA was the only provider of space transportation for the United States for decades, that is no longer the case. NASA is trying its best to work with the emerging private space industry, but the Agency needs to realize that it is no longer the only avenue for these companies. As the private space industry grows and develops, this industry could break away from NASA altogether. The public has shown its interest in space companies and the industry may chose to pursue private clients instead of government contracts.

NASA can help this new industry live long and prosper, but it must do so fairly. The current system lets NASA pick and choose the companies it wants to do business with and requires no explanation about why it rejected a bid and accepted another. The current system does not force NASA to explain why a typical government procurement contract was unrealistic for the situation in question. Private companies who want to work with NASA pour lots of money and manpower into these bids on NASA's behalf. NASA should allow these businesses a way to air their grievances and be heard. As the private space industry grows the pressure will soon be on NASA to change its methods. If NASA decides to maintain the status quo, the Agency that was created to help the United States win the space race could find itself the ultimate loser of the race instead. Business is really all about adaptation, and the question for NASA in the future is will the Agency adapt to meet the demands of its new clientele. If the Agency refuses to change, the countdown to NASA's demise may have already begun.

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[244] *See generally* Bryan Parrish, *Commercializing Space: Intellectual Property Concerns with Space Act Agreements*, 78 J. AIR L. & COM. 651, 688 (2013) (discussing that private space companies will become less and less dependent on NASA).

[245] *See* Gabrynowicz, *supra* note 242, at 406 (internal quotation marks omitted) (discussing emerging issues for the future of space law).