

UNIVERSITY OF PITTSBURGH LAW REVIEW ONLINE

Vol. 83 • 2022

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ISSN 1942-8405 (online) • DOI 10.5195/lawreview.2022.877

<http://lawreview.law.pitt.edu>



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SECURING DEMOCRACY: THE RIGHT TO VOTE FROM OUTER SPACE

Mia Bonardi*

INTRODUCTION

The U.S. Constitution, one of the world's oldest constitutions still in use today, does not explicitly guarantee the right to vote for every citizen.¹ Meanwhile, proposed futuristic constitutions for life on other planets clearly secure this fundamental right for their citizens.² For citizens of democracies on earth, securing the right to vote on earth faces many hurdles, including voter suppression, voting reform, and voting rights restoration.³ It is necessary to address such issues not only to secure the right to vote—but to secure democracy itself.⁴ Additionally, increased and prolonged human space flight could pose just another barrier to the ballot box for citizens of earthly democracies living in outer space.⁵ Earthly democracies must

* Suffolk University Law School, J.D. 2022, International Law Concentration. The author would like to thank Professor Sara Dillon for her guidance and encouragement, Attorney David Concannon for his invaluable review and feedback, and the staff of the *University of Pittsburgh Law Review* for their editorial assistance.

¹ *Right to Vote Amendment*, FAIR VOTE, https://www.fairvote.org/right_to_vote_amendment (last visited Dec. 3, 2021); Jeff Desjardins, *Mapped: The World's Oldest Democracies*, WORLD ECONOMIC FORUM (Aug. 8, 2019), <https://www.weforum.org/agenda/2019/08/countries-are-the-worlds-oldest-democracies> [<https://perma.cc/P4BS-NKE6>].

² See, e.g., Louis de Gouyon Matignon, *Proposal for a Martian Constitution*, SPACE LEGAL ISSUES (Jan. 14, 2020), <https://www.spacelegalissues.com/proposal-for-a-martian-constitution/> [<https://perma.cc/U82A-Z69D>].

³ *Ensure Every American Can Vote*, BRENNAN CENTER FOR JUSTICE, <https://www.brennancenter.org/issues/ensure-every-american-can-vote> [<https://perma.cc/9TR5-MX95>].

⁴ *Id.*

⁵ Mathilde Minet, *Can Astronauts Vote in Space?*, SPACE LEGAL ISSUES (Feb. 14, 2020), <https://www.spacelegalissues.com/can-astronauts-vote-in-space/> [<https://perma.cc/UH7V-SK5T>].

develop abreast of scientific advancements and guarantee this fundamental right for everyone, including space travelers.⁶

While all democracies on earth should address the right to vote from space, early spacefaring nations should specifically focus on this issue to ensure the future of their democracies. This Note will focus on securing the right to vote from outer space, specifically in the United States. Even as the tempo of space travel has increased since the only U.S. law giving citizens the right to vote from space was passed in Texas twenty-five years ago, neither the U.S. Congress nor any other state has taken up the issue.

The current U.S. democratic system will remain idle until the U.S. Constitution guarantees the fundamental right to vote for every citizen or until the forty-nine states with explicit rights to vote in their Constitutions confer this fundamental right.⁷ Steps to secure the right to vote from outer space could kickstart either of these processes or promote the ideation of something greater. Specifically, the necessity and ease of allowing voting from space provides how simple it would be to guaranty the right to vote on the ground in the United States. To start, states should enact statutes allowing space travelers absent during the early voting period and on election day to vote from space.

I. AN IDLE DEMOCRACY

Although the United States has one of the longest-standing democracies in the world, its Constitution, which came into effect in 1789, does not guarantee all U.S. citizens the right to vote.⁸ Out of 119 representative democracies globally, the United

⁶ This Note uses the term “space travelers” to broaden the category of people laws allowing voting from space should be applicable to. Since certain requirements must be met for someone to receive an “astronaut” designation, this Note argues that any person absent during the early voting period and on election day because they are traveling in outer space should be able to vote from space; *see, e.g.*, Denise Chow, *Who Gets to Be Called an Astronaut? It's Complicated*, NBC NEWS (July 23, 2021, 3:22 PM EDT), <https://www.nbcnews.com/science/space/gets-called-astronaut-complicated-rcna1499> [https://perma.cc/LXZ4-HG22]; Nicole Karlis, *The FAA Just Redefined the Word “Astronaut” So That Jeff Bezos Doesn't Qualify*, SALON (July 27, 2021, 5:30 AM EDT), <https://www.salon.com/2021/07/27/the-faa-just-redefined-the-word-astronaut-so-that-jeff-bezos-doesnt-qualify/> [https://perma.cc/TT3J-QW3Q].

⁷ *See infra* note 12.

⁸ *Right to Vote Amendment, supra* note 1 (“While the U.S. Constitution bans the restriction of voting based on race, sex and age, it does not explicitly and affirmatively state that all U.S. citizens have a right to vote.”); Desjardins, *supra* note 1.

States. is one of the eleven governments that does not guarantee this right.⁹ Also, “[i]n the last three decades . . . every single new constitution [of a representative democracy] has established a citizen’s entitlement to vote.”¹⁰ Unless and until the United States amends its Constitution to reflect this fundamental democratic value, it is up to the states to regulate voting.¹¹

While “[f]orty-nine states explicitly grant the right to vote through specific language in their state constitutions,” state judiciaries’ interpretation of this explicit right varies.¹² For example:

State courts construe state constitutional provisions regarding individual rights either under a lockstep approach or through a state-focused mechanism, such as the interstitial or primacy approaches. When courts lockstep, they automatically adopt federal jurisprudence for the right at issue, declaring that state law goes only as far as federal law. Under an interstitial methodology, courts first consider the “federal floor” under the U.S. Constitution before then analyzing independently whether the state constitution provides greater protection. A primacy approach is the opposite of lockstep: it first considers the state constitution and relies on the

⁹ Alexander Kirshner, *The International Status of the Right to Vote*, DEMOCRACY COAL. PROJECT, <https://fairvote.app.box.com/v/kirshner-international-rtv> [<https://perma.cc/2X2E-R8PT>].

¹⁰ *Id.*

¹¹ See *Right to Vote Amendment*, *supra* note 1.

¹² Joshua A. Douglas, *The Right to Vote Under State Constitutions*, 67 VAND. L. REV. 89, 101–02 (2014) (“The text is typically couched in terms that a citizen “shall be qualified to vote,” “shall be entitled to vote,” or “is a qualified elector.” Most of these provisions directly define who is eligible to vote, such as that “[e]very United States citizen age 18 or older who is a resident of an election district in this state is a qualified elector of that district.” That is, state constitutions grant voting rights to all individuals who are citizens of the United States, residents of the state for a certain period preceding the election, and over eighteen years old. Some state constitutions also authorize legislatures to set out rules for registering voters or to provide for absentee balloting or early voting. Certain state constitutions deny voting rights to convicted felons or mentally incompetent persons. Finally, a few state constitutions allow the state’s legislature to enact other “necessary” voting procedures to root out fraud or protect the integrity of the election process. But at bottom, state constitutions include specific language granting voting rights to the state’s citizens. Only Arizona’s constitution does not explicitly grant the right to vote, instead stating that “[n]o person shall be entitled to vote . . . unless” the person meets the citizenship, residency, and age requirements. This language still implicitly grants the right to vote, albeit in the reverse of all other states, because it provides who may not vote (no one unless they meet the state’s eligibility requirements).”

U.S. Constitution only if state protection is not robust enough to vindicate the plaintiffs' rights.¹³

Since “lockstepping is the prevailing norm for most state constitutional adjudication,”¹⁴ the reciprocal reliance of state and federal constitutional interpretation inhibits the right to vote. Thus, if all eligible citizens cannot vote, the democratic system is not functioning as intended.

The U.S. democratic system needs a kickstart into securing the right to vote for everyone. As noted above, there are two means of constitutionally ensuring this right.¹⁵ However, it is unlikely that Congress will adopt either of these solutions. Thus, a new legal rationale or theory must help push the democratic system to secure this fundamental right for all.

II. A NEW REALITY

With humans currently in orbit around Earth on the International Space Station (“ISS”) and targets to put humans back on the Moon in this decade and on Mars in the next, ensuring that the fundamental right to vote extends to wherever humans are, is vital.¹⁶ Experts in Space Law note that:

[S]pace has started to host all sorts of human activities, or better, play a fundamental role in them: military, scientific, administrative, crime fighting and

¹³ *Id.* at 105.

¹⁴ *Id.* at 106 (citing Michael E. Solimine, *Supreme Court Monitoring of State Courts in the Twenty-First Century*, 35 IND. L. REV. 335, 338 (2002) (explaining that “systematic studies demonstrate that most state courts, when presented with the opportunity, have chosen not to depart from federal precedents when interpreting the rights-granting provisions of state constitutions”)).

¹⁵ *Id.* at 105.

¹⁶ Brian Dunbar, *Apollo's Legacy Is NASA's Future*, NAT'L AERONAUTICS & SPACE ADMIN., <https://www.nasa.gov/specials/apollo50th/back.html> [<https://perma.cc/EXZ4-5M9X>]; *How Investing in the Moon Prepares NASA for First Human Mission to Mars*, NAT'L AERONAUTICS & SPACE ADMIN., <https://www.nasa.gov/sites/default/files/atoms/files/moon-investments-prepare-us-for-mars.pdf> [<https://perma.cc/KZ8Y-PXN7>]; see also Darrell Etherington, *NASA Details Intent to Replace the International Space Station With a Commercial Space Station by 2030*, TECH CRUNCH (Nov. 30, 2021), <https://techcrunch.com.cdn.ampproject.org/c/s/techcrunch.com/2021/11/30/nasa-details-intent-to-replace-the-international-space-station-with-a-commercial-space-station-by-2030/amp/> [<https://perma.cc/PK4X-9M4W>]; Joey Roulette, *Jeff Bezos' Rocket Company Wants to Build a Space Station*, N.Y. TIMES (Oct. 25, 2021), <https://www.nytimes.com/2021/10/25/science/space-station-blue-origin-sierra.html?referringSource=articleShare> [<https://perma.cc/TG88-C3FK>] (discussing commercial space stations).

anti-terrorism, commercial, and humanitarian—and thus, in regulating the behavior of all sorts of humans to go with them And wherever man goes, the taxman soon follows.¹⁷

U.S. astronauts are still required to pay taxes¹⁸ because “the IRS doesn’t consider international airspace, or international waters, or space, abroad. [So, astronauts] have to pay US taxes on all of their income.”¹⁹ Thus, space travelers will still care about exercising their right to vote in democratic societies on earth because it is inevitable that they will still be subject to taxes and regulation by them.²⁰ In fact, “[t]he first astronauts that performed long missions needed to keep a strong connection with Earth. [Voting] helps them keep the feeling that they are still participating in the life of Earth, and especially in the life of their nation.”²¹ In the coming years and decades, more humans will travel to space.²² And thus, wherever humans go, the ballot box must follow.

III. A SHORT HISTORY OF VOTING FROM SPACE

In 1996, Texas State Senator Mike Jackson heard that U.S. astronaut John Blaha could not vote in the presidential election between Bill Clinton and Bob Dole because he was on a mission to the Russian Mir Space Station.²³ Senator Jackson,

¹⁷ FRANS G. VON DER DUNK & FABIO TRONCHETTI, HANDBOOK OF SPACE LAW 125 (Edward Elgar Publishing 2015).

¹⁸ *Do Astronauts Have To File US Taxes From Space?*, BRIGHT!TAX (June 6, 2019), <https://brighttax.com/blog/astronauts-file-us-taxes-space/> [<https://brighttax.com/blog/astronauts-file-us-taxes-space/>]; see also Tariq Malik, *Tax Day in Space: How NASA Astronauts Pay Uncle Sam*, SPACE.COM (Apr. 15, 2014), <https://www.space.com/25513-taxes-in-space-nasa-astronauts.html> [<https://perma.cc/U9LL-Z85D>] (“NASA astronauts typically file taxes before launching into space.”).

¹⁹ *Do Astronauts Have To File US Taxes From Space?*, *supra* note 18; see also Sophia Yan, *Nobody Escapes U.S. Taxes—Even Astronauts*, CNN: MONEY (Feb. 13, 2015, 2:56 AM ET), <https://money.cnn.com/2014/12/07/pf/astronaut-taxes-irs/index.html> [<https://perma.cc/7FP2-WKTE>].

²⁰ See, e.g., Bryan Pietsch, *Going to Space For Fun? You Should Be Taxed, Lawmaker Says.*, WASH. POST (July 23, 2021, 4:03 AM EDT), <https://www.washingtonpost.com/technology/2021/07/23/lawmaker-tax-space-flights/> [<https://perma.cc/73FZ-PEJD>].

²¹ Minet, *supra* note 5.

²² See *supra* note 16.

²³ Minet, *supra* note 5; Marina Koren, *The First American to Vote From Space*, THE ATLANTIC (Nov. 8, 2016), <https://www.theatlantic.com/science/archive/2016/11/voting-from-space/506960/>; Robert Ferris, *NASA Astronauts Can Cast Their Votes From Space*, CNBC (Nov. 8, 2016, 12:21 PM EST), <https://www.cnbc.com/2016/11/08/nasa-astronauts-can-cast-their-votes-from-space.html> [<https://perma.cc/L7W3-XM9C>].

whose district included the Johnson Space Center in Houston, Texas, and who had won his election in 1989 by only 7 out of 26,000 votes, had a particular constituency for and interest in remedying this issue.²⁴ As such, on January 30, 1997, Senator Jackson filed H.B. 841 “Relating to voting procedures for persons on a space flight.”²⁵ As initially submitted, H.B. 841 stated:

CHAPTER 105. VOTING ON ELECTION DAY BY PERSON ON SPACE FLIGHT

Sec. 105.001. APPLICABILITY. This chapter applies only to a person who:

- (1) is eligible to vote in this state; and
- (2) is unable to vote in an election because the person is on a space flight, as defined by the secretary of state, on election day and during the early voting period for the election.

Sec. 105.002. VOTING PERMITTED. The secretary of state shall prescribe procedures for voting from space on election day by secure electronic means by persons to whom this chapter applies. The procedures may provide for a deadline by which a person must apply to vote under this chapter.²⁶

In the House, a second subsection was added to § 105.002 to allow “for the secretary of state to work with NASA to use the electronically transmission program to send ballots to astronauts on space flights.”²⁷ As revised in the House, § 105.002 stated:

Sec. 105.002. VOTING PERMITTED. The secretary of state shall prescribe procedures for voting from space on election day by secure electronic means by persons to whom this chapter applies. The procedures may provide for:

- (1) a deadline by which a person must apply to vote under this chapter; and
- (2) the use of the National Aeronautics and Space Administration’s electronic transmission program to send ballots to persons on a space flight.²⁸

²⁴ *Id.*

²⁵ H.B. 841, 75th Reg. Sess. (Tex. 1997).

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.*

The House Committee on Elections requested a Fiscal Note for H.B. 841.²⁹ A Fiscal Note is defined as “a written estimate of the costs, savings, revenue gain, or revenue loss that may result from implementation of a bill or joint resolution.”³⁰ The Fiscal Note on H.B. 841 stated:

The Office of the Secretary of State estimates that the bill would require it to enter into a contract with outside consultants for the development of software for security and development of an electronic voter relay system to a voter in space, using JAVA software. The Secretary of State also estimates that the bill would require the purchase of hardware for the electronic voting system. The total cost for developing a secure system for voting from space would be a one-time cost, which is estimated at \$94,000.³¹

The Fiscal Note further noted that:

The county of residence of the affected voters would probably be responsible for tallying votes for the people in space, and a county may be required to obtain equipment necessary to receive ballots from the Secretary of State.³²

H.B. 841 appears to have never received a “Nay” vote during the legislative process and a House Research Organization bill analysis recorded “[n]o apparent opposition” to it.³³ The same bill analysis explained in support that:

The International Space Station, which will begin construction in the fall of 1997, will serve many longer space flights, and the numbers of astronauts in space on election day will increase.

Many of these astronauts will be Texas residents; therefore, Texas has a duty to implement the first state program providing for voting from space.

²⁹ *Id.*

³⁰ *Fiscal Notes Overview*, LEGISLATIVE BUDGET BOARD 86TH REGULAR SESSION, https://www.lbb.state.tx.us/Fiscal_Notes/Fiscal%20Note%20Overview.pdf [<https://perma.cc/EZX9-XES2>].

³¹ H.B. 841, 75th Reg. Sess. (Tex. 1997).

³² *Id.*

³³ H.B. 841, 75th Reg. Sess. (Tex. 1997); *Bill Analysis*, HOUSE RESEARCH ORGANIZATION, <https://lrl.texas.gov/scanned/hroBillAnalyses/75-0/HB841.PDF> [<https://perma.cc/CN3J-B8GU>].

Voting from space would not be difficult nor expensive. NASA's electronic transmission program already sends materials to astronauts in space, and ballots could be sent by the same means with little extra effort. The Secretary of State's Office would work with NASA to ensure the ballots' security.

The right to vote should not be denied any properly registered Americans, least of all those who are exploring space on behalf of our nation. CSHB 841 would preserve voting rights for all as more and more citizens depart for the final frontier.³⁴

On May 10, 1997, the Texas House passed H.B. 841, and on May 26, 1997, the Texas Senate passed it.³⁵ On May 27, 1997, both the Texas House and Senate signed it, and on June 18, 1997, H.B. 841 was signed by the Texas Governor, former President George W. Bush.³⁶ The law became effective on September 1, 1997.³⁷ The Texas Election Code has since been renumbered, and these laws are now §§ 106.001 and 106.002, respectively.³⁸

Several astronauts have exercised their right to vote under §§ 106.001 and 106.002.³⁹ The first astronaut to vote in a U.S. election from space, David Wolf, said in 1997, "It's important. It makes me feel attached to the ground like I didn't feel before. I feel it's more important here in space even than I did on the ground. Voting's important to all of us. It's what puts the people in charge."⁴⁰ The process for voting in space under §§ 106.001 and 106.002 is described as follows:

The secure electronic ballot is generated by the appropriate county clerk's office in Texas, uplinked by NASA's Johnson Space Center Mission Control Center and

³⁴ *Bill Analysis*, *supra* note 33.

³⁵ *H.B. 841 Actions*, LEGISLATIVE REFERENCE LIBRARY OF TEXAS, <https://lrl.texas.gov/legis/BillSearch/actions.cfm?legSession=75-0&billtypeDetail=HB&billNumberDetail=841&billSuffixDetail=> [https://perma.cc/BU8J-6TH6].

³⁶ *H.B. 841; George W. Bush*, LEGIS. REFERENCE LIBR. TEX., <https://lrl.texas.gov/legeLeaders/governors/govPage.cfm?governorID=43> [https://perma.cc/SK2Q-LFDG].

³⁷ 1997 TEX. GEN. LAWS 2714.

³⁸ TEX. ELEC. CODE ANN. § 106 (1999); *Bill Analysis*, *supra* note 33.

³⁹ Michelle Lotker, *How Do Astronauts Vote From Space?*, PBS N.C. (Nov. 2, 2020), <https://www.pbsnc.org/blogs/science/voting-from-space/> [https://perma.cc/56XP-2S8Q].

⁴⁰ *NASA-6 David Wolf: Recommitment to Mir*, SHUTTLE-MIR PROGRAM CD-ROM, <https://history.nasa.gov/SP-4225/nasa6/nasa6.htm> [https://perma.cc/F7H4-ZU86].

an email with credentials specific to the crew member is sent as well, allowing only the designated crew member to access the ballot. Astronauts fill out their ballots and email them back to the county clerk, via a Tracking and Data Relay Satellite to a ground antenna at the White Sands Complex in Las Cruces, New Mexico. From there, the ballot goes through Mission Control at NASA's Johnson Space Center and then back to the original county clerk, who opens the file and transfers the astronauts selections to a physical paper ballot.⁴¹

In 2020, Astronaut Katie Rubins also used §§ 106.001 and 106.002 to vote from the ISS.⁴² Before her trip to space, Rubins said of voting that “if we can do it from space then I believe folks can do it from the ground too.”⁴³

CONCLUSION

Despite being one of the longest-standing democracies in the world, the U.S. Constitution does not guarantee the right to vote.⁴⁴ Voting rights in the United States must evolve and securing the right to vote from outer space—through a constitutional Amendment or state regulations—could kickstart the necessary changes to promote something greater for the fundamental right to vote.

In the coming years and decades, not all space travelers will be required to go through rigorous astronaut training at the Johnson Space Center in Houston, Texas, and will, therefore, not all hail from Texas.⁴⁵ At present, “those wishing to vote as residents of their home states [must] work with their counties to make special arrangements to vote from space” without the benefit of a dedicated state law.⁴⁶ As has been noted, “Eventually, space voting laws might have to be adopted elsewhere in the U.S., if private astronauts are going to be living and working in space for the

⁴¹ Lotker, *supra* note 39.

⁴² *Id.*

⁴³ *Id.*

⁴⁴ Desjardins, *supra* note 1.

⁴⁵ See, e.g., Kenneth Chang, *How Did the Inspiration4 Crew Train for Their Flight?*, N.Y. TIMES (Sept. 15, 2021), <https://www.nytimes.com/2021/09/15/science/spacex-launch-crew-training.html> [<https://perma.cc/NLR8-2LV3>].

⁴⁶ *Astronauts to Vote in Space*, NAT'L AERONAUTICS & SPACE ADMIN. (Sept. 29, 2020), <https://www.nasa.gov/feature/astronauts-to-vote-in-space>.

long haul.”⁴⁷ Thus, more states must introduce and enact laws like H.B. 841 to guarantee space travelers the right to vote from outer space and to further secure democracy on earth.⁴⁸

⁴⁷ Miriam Kramer, *A Brief History of Voting from Space*, AXIOS (Nov. 3, 2020), <https://www.axios.com/history-of-voting-from-space-86d3a59c-ddef-4d97-b186-cfddfe884fd3.html> [https://perma.cc/ML8D-5UPZ].

⁴⁸ H.B. 841, 75th Reg. Sess. (Tex. 1997).