~~117~~TH CONGRESS
1ST SESSION

H. R. 000x

To amend the Internal Revenue Code to encourage the timely development of Space Traffic Management services, in support of United States Space Policy Directive 3, and the safety of space flight operations, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES
~~May 17, 2021~~
~~Mr. Beyer (for himself, Mr. Brooks, Mr. Garcia, Mr. Perlmutter, Ms. Lofgren, Ms. Houlahan, Mrs. CAPPS, Mr. PAUL, Mr. FOLEY, Mr. HINOJOSA, Mr. LUCAS of Oklahoma, Mr. BARTON of Texas, Mr. DOOLITTLE, and Mr. BURGESS) introduced the following bill; which was referred to the Committee on Ways and Means~~

A BILL

To amend the Internal Revenue Code to encourage the timely development of Space Traffic Management services, in support of United States Space Policy Directive 3, the U.S. National Orbital Debris Research and Development Plan, and the safety of space flight operations, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION I - SHORT TITLE; TABLE OF CONTENTS

(A) SHORT TITLE – This Act may be cited as the ‘‘STM Act of 2022.’’

(B) TABLE OF CONTENTS

SECTION II - FINDINGS

The Congress hereby finds that:

(1) Given the significance of space activities, the United States considers the continued unfettered access to and freedom to operate in space of vital interested to advance the security, economic prosperity, and scientific knowledge of the Nation.

(2) To maintain United States leadership in space, we much develop a new approach to space traffic management that addresses current and future operational risks.

(3) The United States National Space Policy requires the creation of a safe, stable, secure, and long-term sustainable environment for the safeguarding of critical space systems, components, and infrastructures essential for national security, foreign policy, and economy of the United States.

(4) Most United States Federal agency strategies include objectives to improve space situational awareness and minimize the creation of new orbital debris, but do not support sustainment of the space environment through funding of active debris removal.

(5) Inconsequential progress has been achieved in the United States since the 2010 Federal law was codified in 51 U.S. Code § 31501 Orbital debris stating that "the (NASA) administrator, in conjunction with the heads of other Federal agencies, shall take steps to develop or acquire technologies that will enable the Administration to decrease the risks associated with orbital debris."

(6) The United States National Aeronautics and Space Administration has studied, characterized, and established policy, guidelines, and best practices to control the growth of the orbital debris population, currently estimated at over one million objects.

(7) A United States National Aeronautics and Space Administration study showed that even if "no future launches" occurred, collisions will continue the growth of the debris population and highlights the need for active debris removal of the existing and future debris population.

(8) The 2018 White House Space Policy Directive-3 stipulates that the United States should advance the science and technology of space traffic management, space situational awareness, orbital debris mitigation, and active debris removal to ensure the safety of space flight operations in key orbital regimes.

(9) Space Traffic Management includes Policy, Space Situational Awareness, Orbital Debris Mitigation, and Active Debris Removal, which all support national space policies of the United States to create a safe, secure, and sustainable environment for future generations.

(10) Private sector companies across the United States are already attempting to develop a variety of space traffic management services, but lack of sufficient private financing, particularly in the early stages of development, has proven to be a major obstacle, an obstacle our international partners have overcome.

(11) Given the strengths and creativity of private industry in the United States, a more effective alternative to the approach of our trading partners is for the United States Government to provide incentives industry wide to assist qualifying United States private sector companies to obtain otherwise unavailable private financing for the critical development stages of a project, while at the same time keeping Government involvement at a minimum.

(12) A successful high quality, lower cost United States commercial space traffic management service industry should also lead to substantial United States taxpayer savings through lower United States Government costs for its space access requirements, due to less damage, fewer replacement satellites, and fewer launches.

(13) Industry analyst forecasts predict substantial increase in the global space economy in the next 20 years, requiring immediate activity to sustain the orbital environment.

(14) To avoid undue reliance on foreign space traffic management services, the United States must strive to have sufficient domestic capacity as well as the highest quality and the lowest cost per service provided.

SECTION III - PURPOSES

The purposes of this Act are:

(A) to ensure availability of otherwise unavailable private sector financing for United States private sector development of space traffic management policies and services which will significantly reduce the orbital debris population in key orbital regimes below current levels; and

(B) as a result—

(1) provide credit for financial contribution for space traffic management service providers,

(2) help the United States economy achieve the success forecasted by financiers,

(3) avoid undue reliance on foreign space traffic management services,

(4) reduce the number of orbital debris objects (space junk),

(5) reduce substantially United States Government space traffic management expenditures,

(6) increase the international competitiveness of the United States space industry,

(7) encourage the growth of space-related commerce in the United States and internationally; and,

(8) open the space frontier to the American people.

SECTION IV - DEFINITIONS

In this Act:

(A) SECRETARY. The term ‘‘Secretary’’ means the Secretary of Commerce.

(B) SPACE TRAFFIC MANAGEMENT. The term “space traffic management” means to coordinate a framework of space flight safety standards, best practices, and guidelines for safe access,

operation, and return from space by use of policy, space situational awareness, mitigation, and active debris removal to safeguard the commercial, civil, and national security sectors.

(C) STM POLICY. The term "STM Policy" means to define and state what the Space Traffic Management program seeks to achieve, its principles, values, philosophies, objectives, strategies, actions to be taken, desired outcomes, performance indicators, management plans, operational rules, and program review.

(D) SPACE SITUATIONAL AWARENESS. The term "space situational awareness" means gather and disseminate information regarding the space environment via ground- and space-based observations, including improving existing methodology coverage and accuracy, and establishing an open architecture data repository for utilization during mitigation and active debris removal services.

(E) ORBITAL DEBRIS MITIGATION. The term "orbital debris mitigation" means prevention of space debris population growth using treaties, requirements, measures, procedures, processes, guides, practices, and handbooks stipulated by the United States National Aeronautics and Space Administration, the United States Air Force, United States Space Force, and international governing bodies, as required.

(F) ACTIVE DEBRIS REMOVAL. The term "active debris removal" means the on-orbit action of orbital debris remediation or removal of a debris object that orbits around the Earth at various altitudes, to reduce the overall debris population and likelihood of future debris collision and fragmentation occurrences. This on-orbit action of active debris removal shall place the debris into a "parking lot" orbit or shall reduce the altitude of the debris sufficiently to allow it to reenter the atmosphere and undergo aerodynamic and aero heating forces.

(G) ORBITAL DEBRIS. The term "orbital debris" means 'junk' that is circling the Earth and may remain there for years, decades, or centuries. Also known as, space junk, space debris, space pollution, space waste, or space garbage. It is comprised of dead satellites, spend rocket bodies, rocket launch ejecta, mission related debris, fragments from explosions or collisions, disintegration fragments, fragments that chip off spacecraft due to erosion or thermal cycling, paint chips, solidified liquids, reactor coolant droplets, etc.

(H) STATE. The term ''State'' means any State in the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any other commonwealth, territory, or possession of the United States.

(I) TAXPAYER. The term "taxpayer" means any person or entity who pays taxes in the United States and is not subject to any legal proceedings from the Internal Revenue Service.

(J) UNITED STATES STM SERVICE INDUSTRY. The term ''United States STM service industry'' means the collection of commercial United States STM service providers.

(K) UNITED STATES STM SERVICE PROVIDER. The term ''United States STM service provider'' means a United States commercial provider of STM policy, Space Situational Awareness, Mitigation, and/or Active Debris Removal services.

SECTION V - CREDIT FOR CONTRIBUTION TO STM SERVICE PROVIDER

(A) IN GENERAL, **Title 26** Internal Revenue Code, **Subtitle A** Income Taxes, **Chapter 1** Normal Taxes and Surtaxes, **Subchapter A** Determination of Tax Liability, **Part IV** Credits Against Tax is amended by adding the following new subpart:

Subpart K – Space Traffic Management Credit

SEC. 55. CREDIT FOR CONTRIBUTION TO STM SERVICE PROVIDER.

(1) ALLOWANCE OF CREDIT.

(a) IN GENERAL. There shall be allowed as a credit against the tax imposed by this chapter for the taxable year an amount equal to the applicable percentage of the amount paid by the taxpayer during the taxable year for contribution to qualified STM service provider.

(b) APPLICABLE PERCENTAGE. For purposes of paragraph (a), the applicable percentage is the percentage determined in accordance with the following table:

For taxable years beginning in calendar year:	The applicable percentage is:
2020, and 2021	200
2022, and 2023	150
2024	100
2025 and thereafter	100

(2) MAXIMUM CREDIT.

(a) LIMITATION FOR EACH TAXPAYER. The credit allowed under this section with respect to the aggregate amount of contribution to STM service providers during a calendar year shall not exceed:

Unlimited for 2021
$500,000,000 for 2022
$625,000,000 for 2023
$775,000,000 for 2024
$600,000,000 for 2025
$550,000,000 for 2026
$500,000,000 for 2027 and thereafter

(3) CARRY OVER. If contributions exceed limitations for each provider, then any unused tax credits shall carry over to succeeding years until all credits have been claimed.

(4) RETROACTIVE CONTRIBUTIONS. To ensure a quick start for the STM service provider, in the year prior to introduction of this Bill, contributions made by taxpayers to qualified STM service providers shall qualify for the credit against tax in the amount equal to the applicable percentage.

(5) QUALIFIED STM SERVICE PROVIDER. *For purposes of this section:*

(a) IN GENERAL. The term 'qualified STM service provider' means any C-corporation or any membership unit in a State-registered limited liability company (LLC) if:

(i) as of the date of contribution, such corporation is a qualified STM service provider,

(ii) the STM service provider shall setup and maintain the separate contribution account,

(iii) taxpayer contribution is provided to the STM service provider managed account for the purposes of tracking contribution receipt from the taxpayer and fund allocation to the STM service provider, to prevent comingling of funds, and

(iv) the proceeds of such contributions are used by the qualified STM service provider in compliance with the projected usage submitted to the Secretary of Commerce under Section VI United States STM Industry Authorization of the STM Act of 2022 with its application for authorization.

(b) QUALIFIED STM SERVICE. The term 'qualified STM service' means any United States commercial STM provider (as defined in section 4 of the STM Act of 2022) for which an authorization is in effect under section 6 of such Act for services related to STM.

(6) APPLICATION WITH OTHER CREDITS. *The credit allowed under subsection (a) for any taxable year shall not exceed the excess of:*

(a) the sum of the regular tax liability (as defined in section 26(b)) plus the tax imposed by section 55, over

(b) the sum of the credits allowable under this part (other than subpart (4) thereof, relating to refundable credits).''

(B) CONFORMING AMENDMENT. Subsection (a) of section 1016 of such Code is amended by striking ''and'' at the end of paragraph (27), by striking the period at the end of paragraph (28) and inserting ''; and'', and by adding at the end the following new paragraph:

"(29) to the extent provided in section 55(f), in the case of amounts with respect to which a credit has been allowed under section 55 or a recapture imposed under section 55(d).''.

(C) CLERICAL AMENDMENT. The table of subparts for part IV is amended by adding at the end the following new item:

''Subpart H. Space Traffic Management credit.''.

(D) EFFECTIVE DATE. The amendments made by this section shall apply to amounts paid after March 1, 2021.

SECTION VI - UNITED STATES STM INDUSTRY AUTHORIZATION.

(A) UNITED STATES STM INDUSTRY AUTHORIZATION PROGRAM.

(1) ESTABLISHMENT OF PROGRAM. There shall be a United States STM Industry Authorization Program to provide authorization for tax credit qualification under section 55 of the Internal Revenue Code to multiple United States commercial space

traffic management service providers developing policy, space situational awareness, orbital debris mitigation, and/or active debris removal services for the management of the orbital environment.

(2) ADMINISTRATION OF PROGRAM. The program shall be carried out by the Secretary of Commerce under a streamlined application process pursuant to the terms of this section and any regulations that may be promulgated hereunder, in consultation with other United States Government officials, and private sector representatives, as necessary, to ensure fair, effective, and timely program administration and streamlined authorization.

(3) SCOPE OF PROGRAM.

(a) TEMPORARY GOVERNMENT SUPPORT. The United States STM Service Industry Authorization Program is intended to provide eligibility for tax credits under section 55 of the Internal Revenue Code to contributors to support financing of qualified commercial STM service provider ventures during the time their services are required.

(b) EXCLUSION OF NONRELATED ACTIVTIES. The program does not provide authorization for any corporation unless its business plan provides that the main core mission of the corporation is the construction, reconstruction, reconditioning, sale, or distribution of any product which is integral to the design, development, construction, reconstruction, or reconditioning of a space traffic management, space situational awareness, orbital debris mitigation, or active debris removal service as described in subsection (B).

(4) NONDISCLOSURE OF CONFIDENTIAL MATERIALS. Materials that are submitted by a United States commercial STM service provider to the Secretary in connection with an application submitted under the United States STM Service Authorization Program and deemed by the commercial provider to be confidential, and that contain trade secrets or proprietary commercial, financial, or technical information of a kind not customarily disclosed to the public, shall not be disclosed by the Secretary to persons other than Government officers or employees notwithstanding any other provision of law.

(5) CONSULTATION. The Secretary shall consult to the extent deemed necessary for effective implementation of this Act with appropriate Federal agencies and congressional and STM service provider industry representatives.

(6) PROGRAM MANAGEMENT. The Secretary shall manage the authorization program consistent with the purposes of this Act.

(B) AUTHORIZATION OF STM SERVICE PROVIDERS.

(1) AUTHORIZATION BASED ON REASONABLE POSSIBILITY OF SUCCESS.

(a) IN GENERAL. The Secretary shall authorize STM service providers who demonstrate by the submission of technical and financial information that they have a reasonable possibility of developing, operating, and maintaining an STM service.

(b) RESPONSE BY SECRETARY. Authorization by the Secretary is deemed granted unless within 120 days of application submission the Secretary determines that the provider has no reasonable possibility of significantly reducing the space debris population.

(2) POSSIBLE COMMERCIAL VIABILITY AND CAPITAL REQUIREMENT TO QUALIFY CONTRIBUTION FOR CREDIT. To demonstrate possible commercial viability the United States commercial STM service provider must raise $3,000,000 of financial contribution during the year of application to qualify its contributors for credit under this Act. Funds raised to meet commercial viability test is eligible for credit once authorization has been completed.

(3) ANNUAL VERIFICATION OF SUBSTANTIAL COMPLIANCE.

(a) IN GENERAL. Once authorized, an STM service provider must submit to the Secretary each year a certified audit opinion letter verifying its use of funds in substantial compliance with its application.

(b) CONSEQUENCE OF FAILURES.

(i) Failure to submit a certified audit opinion letter verifying substantial compliance with its application will result in deauthorization of the STM service provider.

(ii) Failure to use funds received after authorization for the development of an STM service with the goal to reduce space debris population significantly below current levels will result in deauthorization. Failure to achieve success will not result in deauthorization.