..... (Original Signature of Member)

119TH CONGRESS 1ST SESSION



To establish a pilot program to assess the use of technology to speed up and enhance the cargo inspection process at land ports of entry along the border.

IN THE HOUSE OF REPRESENTATIVES

Mr. HIGGINS of Louisiana introduced the following bill; which was referred to the Committee on ______

A BILL

- To establish a pilot program to assess the use of technology to speed up and enhance the cargo inspection process at land ports of entry along the border.
 - 1 Be it enacted by the Senate and House of Representa-
 - 2 tives of the United States of America in Congress assembled,

3 SECTION 1. SHORT TITLES.

4 This Act may be cited as the "Contraband Awareness

5 Technology Catches Harmful Fentanyl Act" or the

6 "CATCH Fentanyl Act".

7 SEC. 2. DEFINITIONS.

8 In this Act:

1	(1) APPROPRIATE CONGRESSIONAL COMMIT-
2	TEES.—The term "appropriate congressional com-
3	mittees" means—
4	(A) the Committee on Homeland Security
5	and Governmental Affairs of the Senate; and
6	(B) the Committee on Homeland Security
7	of the House of Representatives.
8	(2) Artificial intelligence; al.—The terms
9	"artificial intelligence" and "AI" have the meaning
10	given the term "artificial intelligence" in section
11	238(g) of the John S. McCain National Defense Au-
12	thorization Act for Fiscal Year 2019 (Public Law
13	115–232; 10 U.S.C. 4061 note).
14	(3) CBP INNOVATION TEAM.—The term "CBP
15	Innovation Team" means the U.S. Customs and
16	Border Protection Innovation Team within the Of-
17	fice of the Commissioner.
18	(4) Nonintrusive inspection technology;
19	NII TECHNOLOGY.—The terms "nonintrusive inspec-
20	tion technology" and "NII technology" means tech-
21	nical equipment and machines, such as X-ray or
22	gamma-ray imaging equipment, that allow cargo in-
23	spections without the need to open the means of
24	transport and unload the cargo.

1	(5) PILOT PROJECTS.—The term "pilot
2	projects" means the projects required under section
3	3(a) for testing and assessing the use of technologies
4	to improve the inspection process at land ports of
5	entry.
6	SEC. 3. PILOT PROJECTS ALLOWING ADDITIONAL TECH-
7	NOLOGY PROVIDERS TO PARTICIPATE IN IN-
8	SPECTING CARS, TRUCKS, AND CARGO CON-
9	TAINERS AT CERTAIN PORTS OF ENTRY.
10	(a) Establishment.—
11	(1) IN GENERAL.—Not later than 1 year after
12	the date of the enactment of this Act, the Secretary
13	of Homeland Security, acting through CBP Innova-
14	tion Team, and in coordination with the Office of
15	Field Operations and the Department of Homeland
16	Security Science and Technology Directorate, shall
17	begin the implementation of pilot projects for testing
18	and assessing the use of technologies or technology
19	enhancements to improve the process for inspecting,
20	including by increasing efficiencies of such inspec-
21	tions, any conveyance or mode of transportation at
22	land ports of entry along the borders of the United
23	States. The technologies or technology enhancements
24	tested and assessed under the pilot projects shall be
25	for the purpose of assisting U.S. Customs and Bor-

der Protection personnel to detect contraband, illegal
 drugs, illegal weapons, human smuggling, and
 threats on inbound and outbound traffic, in conjunc tion with the use of imaging equipment, radiation
 portal monitors, and chemical detectors.

6 (2) REQUIREMENTS.—

7 (A) IN GENERAL.—In implementing the 8 pilot projects at ports of entry, the CBP Inno-9 vation Team, in coordination with the Depart-10 ment of Homeland Security Science and Tech-11 nology Directorate, shall test and collect data 12 regarding not fewer than 5 types of nonintru-13 sive inspection technology enhancements that 14 can be deployed at land ports of entry. The 15 CBP Innovation Team shall test technology en-16 hancements from not fewer than 1 of the fol-17 lowing categories:

- 18 (i) Artificial intelligence.
- 19 (ii) Machine learning.
- 20 (iii) High-performance computing.
- 21 (iv) Quantum information sciences, in-

22 cluding quantum sensing.

23 (v) Other emerging technologies.
24 (B) IDENTIFICATION OF EFFECTIVE EN25 HANCEMENTS.—The pilot projects shall identify

1	the most effective types of technology enhance-
2	ments to improve the capabilities of nonintru-
3	sive inspection systems and other inspection
4	systems used at land ports of entry based on—
5	(i) the technology enhancement's abil-
6	ity to assist U.S. Customs and Border
7	Protection accurately detect contraband, il-
8	legal drugs, illegal weapons, human smug-
9	gling, or threats in inbound and outbound
10	traffic;
11	(ii) the technology enhancement's abil-
12	ity to increase efficiencies of inspections to
13	assist U.S. Customs and Border Protection
14	address long wait times;
15	(iii) the technology enhancement's
16	ability to improve capabilities of aging de-
17	tection equipment and infrastructure at
18	land ports of entry;
19	(iv) the technology enhancement's
20	safety relative to As Low As Reasonably
21	Achievable (ALARA) standard practices;
22	(v) the ability to integrate the new
23	technology into the existing workflow and
24	infrastructure;

1	(vi) the technology enhancement's
2	ability to incorporate automatic threat rec-
3	ognition technology using standard formats
4	and open architecture;
5	(vii) the mobility of technology en-
6	hancements; and
7	(viii) other performance measures
8	identified by the CBP Innovation Team.
9	(C) PRIVATE SECTOR INVOLVEMENT.—The
10	CBP Innovation Team may solicit input from
11	representatives of the private sector regarding
12	commercially viable technologies.
13	(D) COST EFFECTIVENESS REQUIRE-
14	MENT.—In identifying the most effective types
15	of technology enhancements under subpara-
16	graph (B), the pilot projects shall prioritize so-
17	lutions that demonstrate the highest cost-effec-
18	tiveness in achievement the objectives described
19	in clauses (i) through (ix) of subparagraph (B).
20	Cost effectiveness shall account for improved
21	detection capabilities, increased inspection effi-
22	ciencies, reduced wait times, and total cost of
23	implementation (including infrastructure up-
24	grades and maintenance expenses).

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1	(3) Nonintrusive inspection systems pro-
2	GRAM.—The CBP Innovation Team shall work with
3	existing nonintrusive inspection systems programs
4	within U.S. Customs and Border Protection when
5	planning and developing the pilot projects required
6	under paragraph (1).8
7	(4) DATA PRIVACY PROTECTIONS.—In imple-
8	menting the pilot projects and utilizing new tech-
9	nologies, the Secretary of Homeland Security shall
10	safeguard the privacy and security of personal data
11	collected during inspections through appropriate
12	measures, including—
13	(A) adherence to relevant privacy laws and
14	regulations;
15	(B) implementation of data anonymization
16	techniques, if applicable; and
17	(C) regular audits to assess compliance
18	with data privacy standards.
19	(5) Science and technology direc-
20	TORATE.—The CBP Innovation Team shall work
21	with the Department of Homeland Security Science
22	and Technology Directorate to align existing non-
23	intrusive inspection research and development efforts
24	within the Science and Technology Directorate when

planning and developing pilot projects required
 under paragraph (1).

3 (b) TERMINATION.—The pilot projects shall termi4 nate on the date that is 5 years after the date of the enact5 ment of this Act.

6 (c) REPORTS REQUIRED.—Not later than 3 years 7 after the date of the enactment of this Act, and 180 days 8 after the termination of the pilot projects pursuant to sub-9 section (b), the Secretary of Homeland Security shall sub-10 mit a report to the appropriate congressional committees 11 that contains—

- 12 (1) an analysis of the effectiveness of tech13 nology enhancements tested based on the require14 ments described in subsection (a)(2);
- (2) any recommendations from the testing and
 analysis concerning the ability to utilize such technologies at all land ports of entry;

18 (3) a plan to utilize new technologies that meet 19 the performance goals of the pilot projects across all 20 U.S. Customs and Border Protection land ports of 21 entry at the border, including total costs and a 22 breakdown of the costs of such plan, including any 23 infrastructure improvements that may be required to 24 accommodate recommended technology enhance-25 ments;

1 (4) a comprehensive list of existing technologies 2 owned and utilized by U.S. Customs and Border 3 protection for cargo and vehicle inspection, includ-4 ing-(A) details on the implementation status of 5 6 such technologies, such as whether the tech-7 nologies have been fully installed and utilized, 8 or whether there are challenges with the instal-9 lation and utilization of the technology; 10 (B) an evaluation of the compatibility, 11 interoperability, and scalability of existing cargo 12 and vehicle inspection technologies within U.S. 13 Customs and Border Protection's physical and 14 information technology infrastructure; and 15 (C) identification of any obstacles to the 16 effective deployment and integration of such 17 technologies; and 18 (5) the analysis described in subsection (d). 19 (d) AREAS OF ANALYSIS.—The report required under 20 subsection (c) shall include an analysis containing— 21 (1) quantitative measurements of performance 22 based on the requirements described in subsection 23 (a)(2) of each technology tested compared with the

status quo to reveal a broad picture of the perform-

1	ance of technologies and technology enhancements,
2	such as—
3	(A) the probability of detection, false alarm
4	rate, and throughput; and
5	(B) an analysis determining whether such
6	observed performance represents a significant
7	increase, decrease, or no change compared with
8	current systems;
9	(2) an assessment of the relative merits of each
10	such technology;
11	(3) any descriptive trends and patterns ob-
12	served; and
13	(4) performance measures for—
13 14	(4) performance measures for—(A) the technology enhancement's ability to
13 14 15	(4) performance measures for—(A) the technology enhancement's ability to assist with the detection of contraband on in-
 13 14 15 16 	 (4) performance measures for— (A) the technology enhancement's ability to assist with the detection of contraband on inbound and outbound traffic through automated
 13 14 15 16 17 	 (4) performance measures for— (A) the technology enhancement's ability to assist with the detection of contraband on inbound and outbound traffic through automated (primary) inspection by measuring and report-
 13 14 15 16 17 18 	 (4) performance measures for— (A) the technology enhancement's ability to assist with the detection of contraband on inbound and outbound traffic through automated (primary) inspection by measuring and reporting the probability of detection and false alarm
 13 14 15 16 17 18 19 	 (4) performance measures for— (A) the technology enhancement's ability to assist with the detection of contraband on inbound and outbound traffic through automated (primary) inspection by measuring and reporting the probability of detection and false alarm rate for each NII system under operational con-
 13 14 15 16 17 18 19 20 	 (4) performance measures for— (A) the technology enhancement's ability to assist with the detection of contraband on inbound and outbound traffic through automated (primary) inspection by measuring and reporting the probability of detection and false alarm rate for each NII system under operational conditions;
 13 14 15 16 17 18 19 20 21 	 (4) performance measures for— (A) the technology enhancement's ability to assist with the detection of contraband on inbound and outbound traffic through automated (primary) inspection by measuring and reporting the probability of detection and false alarm rate for each NII system under operational conditions; (B) the throughput of cargo through each
 13 14 15 16 17 18 19 20 21 22 	 (4) performance measures for— (A) the technology enhancement's ability to assist with the detection of contraband on inbound and outbound traffic through automated (primary) inspection by measuring and reporting the probability of detection and false alarm rate for each NII system under operational conditions; (B) the throughput of cargo through each NII system with a technology enhancement, in-
 13 14 15 16 17 18 19 20 21 22 23 	 (4) performance measures for— (A) the technology enhancement's ability to assist with the detection of contraband on inbound and outbound traffic through automated (primary) inspection by measuring and reporting the probability of detection and false alarm rate for each NII system under operational conditions; (B) the throughput of cargo through each NII system with a technology enhancement, including a breakdown of the time needed for

1	(i) to complete the image review proc-
2	ess and clear low-risk shipments; and
3	(ii) to complete additional inspections
4	of high-risk items;
5	(C) changes in U.S. Customs and Border
6	Protection officer time commitments and per-
7	sonnel needs to sustain high volume NII scan-
8	ning operations when technology enhancements
9	are utilized; and
10	(D) operational costs, including—
11	(i) estimated implementation costs for
12	each NII system with technology enhance-
13	ments; and
14	(ii) estimated cost savings due to im-
15	proved efficiency due to technology en-
16	hancements, if applicable.
17	(e) Privacy and Civil Liberties Reports.—The
18	Secretary of Homeland Security, in consultation with the
19	CBP Innovation Team and other appropriate offices,
20	shall—
21	(1) prior to the implementation of these tech-
22	nologies, submit—
23	(A) a report or reports to the appropriate
24	congressional committees regarding the poten-
25	tial privacy, civil liberties, and civil rights im-

1	pacts of technologies being tested under the
2	pilot projects pursuant to this section, including
3	an analysis of the impacts of the technology en-
4	hancements on individuals crossing the United
5	States border; and
6	(B) recommendations for mitigation meas-
7	ures to address any identified impacts; and
8	(2) not later than 180 days after the termi-
9	nation of the pilot projects pursuant to subsection
10	(b), submit a report to the appropriate congressional
11	committees containing—
12	(A) findings on the impacts to privacy,
13	civil rights, and civil liberties resulting from the
14	pilot projects;
15	(B) recommendations for mitigating these
16	impacts in implementation of approved tech-
17	nologies; and
18	(C) any additional recommendations based
19	on the lessons learned from the pilot projects.
20	(f) Prohibition on New Appropriations.—No
21	additional funds are authorized to be appropriated to
22	carry out this Act.