

**Calendar No. 547**

116TH CONGRESS }  
2d Session }

SENATE

{ REPORT  
{ 116-268

AMERICAN SECURITY DRONE ACT OF 2020

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R E P O R T

OF THE

COMMITTEE ON HOMELAND SECURITY AND  
GOVERNMENTAL AFFAIRS  
UNITED STATES SENATE

TO ACCOMPANY

S. 2502

TO BAN THE FEDERAL PROCUREMENT OF CERTAIN DRONES AND  
OTHER UNMANNED AIRCRAFT SYSTEMS, AND FOR OTHER PUR-  
POSES



SEPTEMBER 15, 2020.—Ordered to be printed

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SEPTEMBER 15, 2020.—Ordered to be printed

Mr. JOHNSON, from the Committee on Homeland Security and  
Governmental Affairs, submitted the following

R E P O R T

[To accompany S. 2502]

[Including cost estimate of the Congressional Budget Office]

The Committee on Homeland Security and Governmental Affairs, to which was referred the bill (S. 2502) to ban the Federal procurement of certain drones and other unmanned aircraft systems, and for other purposes, having considered the same, reports favorably thereon with an amendment in the nature of a substitute and recommends that the bill, as amended, do pass.

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I. PURPOSE AND SUMMARY

S. 2502, the American Security Drone Act of 2020, prohibits the Federal Government from procuring unmanned aircraft systems (UAS) manufactured or assembled by covered foreign entities beginning two years from the enactment of this bill. The bill includes exemptions for the Departments of Homeland Secretary (DHS), Defense (DOD) and Justice (DOJ) for the purposes of research, evaluation, training, testing, and analysis of counterterrorism activities and counter-UAS technology, among other things. With some exceptions, all executive branch agencies are required to account for

and inventory any existing UAS manufactured or assembled by covered foreign entities.

In addition, the bill requires the Office of Management and Budget (OMB) to develop a government-wide procurement policy of UAS to address the risks associated with processing, transmitting, and storing sensitive information collected from a UAS. The bill also requires an industry study to cover the current and future UAS domestic and global marketplace, technological advancements in the industry, and an assessment of the economic impact of banning the use of foreign-made UAS from the Federal Government. The prohibition on the Federal Government's procurement of UAS by covered foreign entities terminates five years after the bill's enactment.

## II. BACKGROUND AND THE NEED FOR LEGISLATION

The emergence of new technologies and capabilities presents both an opportunity and challenge to the security of the United States. For instance, our nation deploys UAS for everything from the surveillance and fertilization of crops, delivering packages and prescriptions, recreational uses, to national security purposes. However, the reliance on UAS for a wide range of national security applications has called into question the ability of the Federal Government to protect the integrity of data and information collected by these systems, as an estimated 60 percent of UAS operating in the United States are manufactured and assembled by foreign-owned entities.<sup>1</sup>

Specific uses across the Federal Government of UAS include, but are not limited to, wildfire tracking by the Department of Interior (DOI)<sup>2</sup>, researching land use by the Department of Agriculture<sup>3</sup>, and data collection by the Department of Transportation.<sup>4</sup> DHS uses UAS for law enforcement investigations, surveillance of drug routes along the coast, and other sensitive missions.<sup>5</sup> Because the Federal Government uses UAS for a variety of mission sets, including sensitive missions, information security is imperative when data is collected, stored, and transmitted. The procurement of UAS manufactured by certain foreign-owned entities calls into question the Federal Government's ability to employ adequate information security safeguards.

DHS' Cybersecurity and Infrastructure Security Agency (CISA) released a bulletin in May 2019, warning private industry about the "potential risk to an organization's information" when acquiring and operating Chinese-made UAS.<sup>6</sup> The bulletin goes on to explain, "Those concerns apply . . . to certain Chinese-made UAS-

<sup>1</sup> *Skylogic Research Report Unveils Drone Industry Market Share Figures*, Drone Analyst (Sept. 18, 2017), <https://droneanalyst.com/press-release/skylogic-research-report-unveils-drone-industry-market-share-figures>.

<sup>2</sup> Press Release, U.S. Dep't of the Interior, *Interior Announces 2017 Drone Mission Report* (Feb. 21, 2018), <https://www.doi.gov/pressreleases/interior-announces-2017-drone-mission-report>.

<sup>3</sup> *USDA may use drones to monitor vast Western rangeland*, Farm Progress (Apr. 17, 2020), <https://www.farmprogress.com/government/usda-may-use-drones-monitor-vast-western-rangeland>.

<sup>4</sup> U.S. Dep't of Transportation, *Unmanned Aerial Systems* (Oct. 3, 2019), <https://www.fhwa.dot.gov/uas/>.

<sup>5</sup> U.S. Dep't of Homeland Security, *Unmanned Aerial Systems* (last visited Apr. 26, 2020), <https://www.dhs.gov/science-and-technology/unmanned-aerial-systems>.

<sup>6</sup> David Shortell, *DHS warns of 'strong concerns' that Chinese-made drones are stealing data*, CNN (May 20, 2019), <https://www.cnn.com/2019/05/20/politics/dhs-chinese-drone-warning/index.html>.

connected devices capable of collecting and transferring potentially revealing data about their operations and the individuals and entities operating them, as China imposes unusually stringent obligations on its citizens to support national intelligence activities.”<sup>7</sup>

In 2017, the U.S. Army issued guidance discontinuing the use of DJI drones due to security concerns.<sup>8</sup> The DOD went a step further in May 2018, and banned all purchases of commercial-off-the-shelf UAS while they researched and developed a strategy to deal with the potential cybersecurity risks.<sup>9</sup> Ultimately, Congress included a provision in the National Defense Authorization Act for Fiscal Year 2020 prohibiting DOD from using Chinese-made UAS.<sup>10</sup>

There are conflicting views within the Federal Government on the extent of the threat posed by the utilization of foreign-made UAS, how best to minimize potential negative effects of these technologies, and the ability of the American market to fill demand. For instance, after deploying the technology, DOI recognized DJI’s privacy policy and data management systems did not meet the necessary requirements to be utilized in their small UAS fleet.<sup>11</sup> Therefore, DOI contracted with an American-based company that met all technology requirements at an affordable cost to the taxpayer.<sup>12</sup> Unfortunately, the American company halted its UAS manufacturing due to foreign competition, leaving DOI without a cost-effective alternative.<sup>13</sup> In response, DOI coordinated with DJI to produce a “government edition” that would meet DOI’s data management requirements.<sup>14</sup> In order to confirm the suitability of the government edition, DOI’s Office of Aviation Services, along with industry and Federal partners, tested the data management and risk mitigation requirements.<sup>15</sup> DOI found that DJI’s new technology met the required security criteria allowing DOI to manage the flow of data information sharing by the aircraft, the software, and all relevant applications.<sup>16</sup> Similarly, CISA partnered with Idaho National Laboratory to test data flow and management from foreign-made UAS.<sup>17</sup> The study called for more testing of the technology, but confirmed that DJI’s government-edition UAS provided the necessary data management and information security tools to meet the Federal agency’s requirements.<sup>18</sup> Ultimately, the

<sup>7</sup> *Id.*

<sup>8</sup> Gary Mortimer, *US Army calls for units to discontinue use of DJI equipment*, SUAS News (Aug. 4, 2017), <https://www.suasnews.com/2017/08/us-army-calls-units-discontinue-use-dji-equipment/>.

<sup>9</sup> Shawn Snow, *‘Quads for Squads’ grounded over cyber concerns*, Marine Corps Times (Jun 15, 2018), <https://www.marinecorpstimes.com/news/your-marine-corps/2018/06/15/quads-for-squads-grounded-over-cyber-concerns/>.

<sup>10</sup> National Defense Authorization Act for Fiscal Year 2020, Pub. L. No. 116 92, § 848, *available at* <https://www.congress.gov/bill/116th-congress/senate-bill/1790/text>.

<sup>11</sup> U.S. Dep’t of the Interior, *Flight Test and Technical Evaluation Report: DJI Unmanned Aircraft System (UAS) Mission Functionality and Data Management Assurance Assessment* (July 2, 2019), *available at* [https://www.doi.gov/sites/doi.gov/files/uploads/oas\\_flight\\_test\\_and\\_technical\\_evaluation\\_report\\_-\\_dji\\_uas\\_data\\_management\\_assurance\\_evaluation\\_-\\_7-2-19\\_v2.0.pdf](https://www.doi.gov/sites/doi.gov/files/uploads/oas_flight_test_and_technical_evaluation_report_-_dji_uas_data_management_assurance_evaluation_-_7-2-19_v2.0.pdf).

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> U.S. Dep’t of Homeland Sec. Cybersecurity & Infrastructure Sec. Agency, *Aviation Cyber Initiative Unmanned Aircraft System Information Security Risks Limited Scope Test & Evaluation*, Idaho National Laboratory (Oct. 2019).

<sup>18</sup> *Id.*

DOI grounded its non-emergency drone program to review cybersecurity concerns.<sup>19</sup>

S. 2502 prohibits Federal agencies from procuring UAS from designated foreign-made countries and entities. The primary purpose is to prevent nation-state adversaries and other bad actors from exploiting these emerging technologies to obtain sensitive national security information. The prohibition on foreign-made UAS will provide Federal agencies and American drone manufacturers time to adjust to these new regulations and allow the domestic market to evolve. Exemptions are included in the bill for security and mission-critical reasons. One such exemption is for DHS and DOJ to research and test existing UAS to ensure these agencies are capable of countering any and all malicious UAS. Furthermore, the bill creates a government-wide policy for technology and data management standards to ensure that all UAS procured meets a minimum threshold of security regardless of the country of origin. Lastly, the prohibition on the procurement of covered UAS sunsets five years after the enactment of the bill.

### III. LEGISLATIVE HISTORY

Senator Rick Scott (R-FL) introduced S. 2502, the American Security Drone Act of 2019, on September 18, 2019, with Senators Cotton (R-AR), Hawley (R-MO), Rubio (R-FL), Murphy (D-CT), and Blumenthal (D-CT). The bill was referred to the Committee on Homeland Security and Governmental Affairs. Senator Marsha Blackburn (R-TN) later joined as a cosponsor.

The Committee considered S. 2502 at a business meeting on March 11, 2020. During the business meeting, a substitute amendment was offered by Senator Scott and accepted by unanimous consent. The bill, as amended, was ordered reported favorably by voice vote *en bloc*. Senators Johnson, Portman, Lankford, Romney, Scott, Enzi, Hawley, Peters, Carper, Hassan, Harris, Sinema, and Rosen were present for the votes.

### IV. SECTION-BY-SECTION ANALYSIS OF THE BILL, AS REPORTED

#### *Section 1. Short title*

This section names the bill as the “American Security Drone Act of 2020”.

#### *Sec. 2. Definitions*

This section defines “covered foreign entity” and “covered unmanned aircraft system”.

#### *Sec. 3. Prohibition on procurement of covered unmanned aircraft systems from covered foreign entities*

This section prohibits the procurement of a covered UAS by the Federal Government. This section also includes exemptions for DHS and DOJ for the purposes of the research, evaluation, training, testing, or analysis of certain types of warfare, development of counter-UAS technology, counterintelligence activities, Federal investigations, and when required for the national interest. The sec-

<sup>19</sup> Press Release, U.S. Dep’t of the Interior, *Secretary Bernhardt Signs Order Grounding Interior’s Drone Fleet for Non-Emergency Operations* (Jan. 29, 2020), <https://www.doi.gov/pressreleases/secretary-bernhardt-signs-order-grounding-interiors-drone-fleet-non-emergency>.

tion also provides the authority to the head of any executive agency to waive this section on a case-by-case basis and with the approval of the Secretaries of Homeland Security or Defense.

*Sec. 4. Prohibition on operation of covered unmanned aircraft systems from covered foreign entities*

This section prohibits the operation or use of a covered UAS by any Federal agency beginning two years after enactment of the bill. This section also provides the same exemptions and waivers as Section 3. This section also requires the Secretary of Homeland Security to issue guidance and produce regulations to implement the prohibition on the operation of covered UAS by covered foreign entities within 180 days of the bill's enactment.

*Sec. 5. Prohibition on use of federal funds for purchases and operation of covered unmanned aircraft systems from covered foreign entities*

This section prohibits the use of Federal funds through a contract, grant, or cooperative agreement to procure or operate a covered UAS by the defined covered foreign entities beginning two years after this bill is enacted. This section also provides exemptions similar to Section 3. Additionally, this section requires the Federal Acquisition Regulatory Council to provide guidance and prescribe regulations to implement this section within 180 days.

*Sec. 6. Prohibition on use of government-issued purchase cards to purchase covered unmanned aircraft systems from covered foreign entities*

Upon enactment, Federal agencies are prohibited from using government-issued purchase cards to purchase a UAS from a covered foreign entity.

*Sec. 7. Management of existing inventories of covered unmanned aircraft systems from covered foreign entities*

This section requires Federal agencies to account for and track their inventories of UAS from a covered foreign entity regardless of how the agency procured the UAS. Inventory data related to a covered UAS may be tracked at a classified level. This section also includes an exception for DHS and DOD for covered UAS deemed expendable due to the mission risks or that are for one-time-use.

*Sec. 8. Comptroller general report*

This section requires the Government Accountability Office to, within 275 days of enactment, submit a report to Congress on the number of UAS, commercial off-the-shelf and covered UAS procured by Federal agencies from covered foreign entities.

*Sec. 9. Government-wide Policy for procurement of unmanned aircraft systems*

This section requires OMB, along with the National Institute of Standards and Technology and other related Federal agencies, to develop a procurement policy for Federal agencies to procure any UAS. The policy must include provisions related to protections of software, firmware, and hardware; securing sensitively collected, stored, and transmitted information, and other data security re-

quirements. This section also provides exemptions to when Federal agencies are allowed to procure UAS outside of this policy. This section is intended to coincide with the Federal prohibition on the procurement of UAS from covered foreign entities.

*Sec. 10. Study*

This section requires OMB to contract with a Federally-funded research and development center (FFRDC) to study the UAS industry three years after the enactment of this bill, and submit the results of the study to Congress within 30 days of receiving the study from the FFRDC. Specifically, the FFRDC will study the current and future UAS domestic and global market; the ability for domestic companies to compete in the global marketplace; domestic supply chains; and an assessment of the economic impact of this legislation.

*Sec. 11. Sunset*

This section sunsets Sections 3, 4, and 5, five years after the enactment of this bill.

V. EVALUATION OF REGULATORY IMPACT

Pursuant to the requirements of paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee has considered the regulatory impact of this bill and determined that the bill will have no regulatory impact within the meaning of the rules. The Committee agrees with the Congressional Budget Office's statement that the bill contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

VI. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
*Washington, DC, September 9, 2020.*

Hon. RON JOHNSON,  
*Chairman, Committee on Homeland Security and Governmental Affairs, U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 2502, the American Security Drone Act of 2020.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff is Sofia Guo.

Sincerely,

PHILLIP L. SWAGEL,  
*Director.*

Enclosure.



<b>S. 2502, American Security Drone Act of 2020</b>			
As ordered reported by the Senate Committee on Homeland Security and Governmental Affairs on March 11, 2020			
By Fiscal Year, Millions of Dollars	2020	2020-2025	2020-2030
Direct Spending (Outlays)	0	*	*
Revenues	0	0	0
Increase in the Deficit	0	*	*
Spending Subject to Appropriation (Outlays)	0	1	not estimated
Statutory pay-as-you-go procedures apply?	Yes	<b>Mandate Effects</b>	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2031?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No
* = between zero and \$500,000.			

S. 2502 would prohibit most federal agencies from procuring or operating unmanned aircraft systems manufactured or assembled by a covered foreign entity, which includes, for example, an entity that poses a national security risk. The Department of Homeland Security, the Department of Defense, and the Attorney General would be exempt from the bill's prohibitions for such systems that are acquired or operated under certain conditions. The new prohibitions would sunset five years after enactment.

The bill would require the Office of Management and Budget to establish a policy for procuring unmanned aircraft systems for operations outside of the defense and intelligence communities and would require any department or agency not otherwise subject to the Federal Acquisition Regulation to follow the new policy. The bill also would require executive agencies to account for their inventories of covered unmanned aircraft systems and would require various studies and reports.

Using information from the affected agencies, CBO estimates that implementing S. 2502 would cost \$1 million over the 2021–2025 period for additional administrative activities and new reporting requirements. Such spending would be subject to the availability of appropriated funds.

Enacting S. 2502 could affect direct spending by some agencies that are allowed to use fees, receipts from the sale of goods, and other collections to cover operating costs. CBO estimates that any net changes in direct spending by those agencies would be negligible because most of them can adjust amounts collected to reflect changes in operating costs.

The CBO staff contact for this estimate is Sofia Guo. The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.

#### VII. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

Because this legislation would not repeal or amend any provision of current law, it would not make changes in existing law within

the meaning of clauses (a) and (b) of paragraph 12 of rule XXVI of the Standing Rules of the Senate.

