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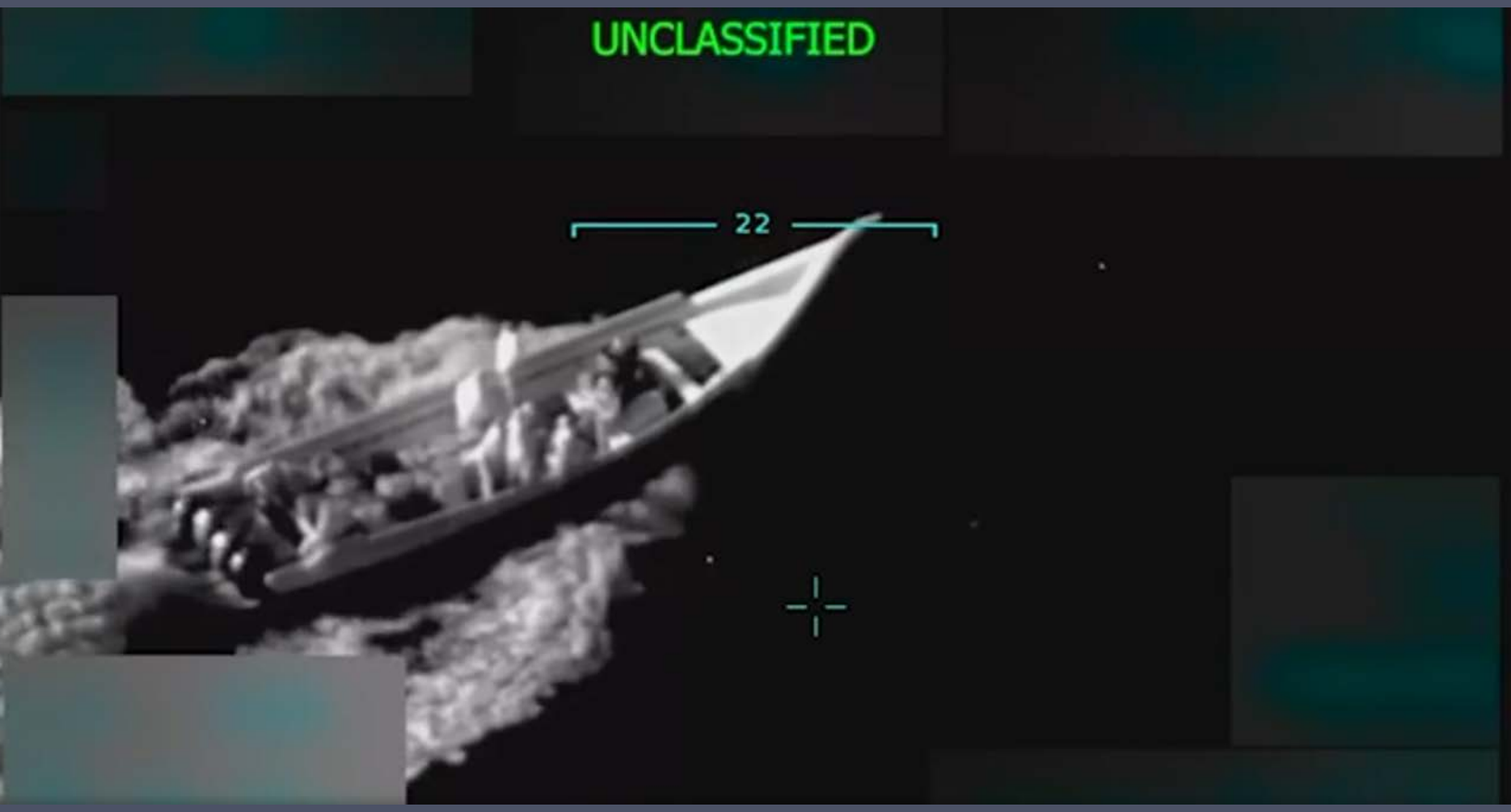
Targeted from above

Canadian sensors facilitating unlawful U.S. airstrikes in the Caribbean



October 2025

Targeted from above: Canadian sensors facilitating unlawful U.S. airstrikes in the Caribbean

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Cover image: Still image from footage of a U.S. airstrike on a vessel in the Caribbean Sea, September 2, 2025. *Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump.*

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On the morning of September 2, 2025, a small speedboat skims across open water somewhere in the Caribbean Sea. Suddenly, in a flash of white, it's destroyed in a U.S.-launched airstrike. All 11 people on board are reportedly killed. Two weeks later, another boat meets the same fate, with reports indicating three more people are killed. Aerial footage of both attacks, posted online by U.S. President Donald Trump, shows more than just a grainy, bird's-eye view of the missions; it reveals the role that Canadian technology played in these airstrikes.

An investigation by Project Ploughshares has confirmed that both operations relied on advanced electro-optical/infrared (EO/IR) sensor systems built in Hamilton, Ontario, by L3Harris WESCAM.

These sensors, sold in large volumes to the U.S. government, are designed to surveil below aircraft, identify potential targets, and coordinate airstrikes with precision. Their distinctive on-screen interface, visible even in the redacted airstrike footage shared by President Trump, confirms that Canadian technology played a central role in the operations.

Human-rights monitors and UN officials have determined that the attacks, which took place in international waters and targeted alleged drug smugglers in the absence of any declared conflict, amount to extrajudicial killings. This, in turn, raises the question of whether Canadian technology will continue to facilitate such unlawful strikes in the region.

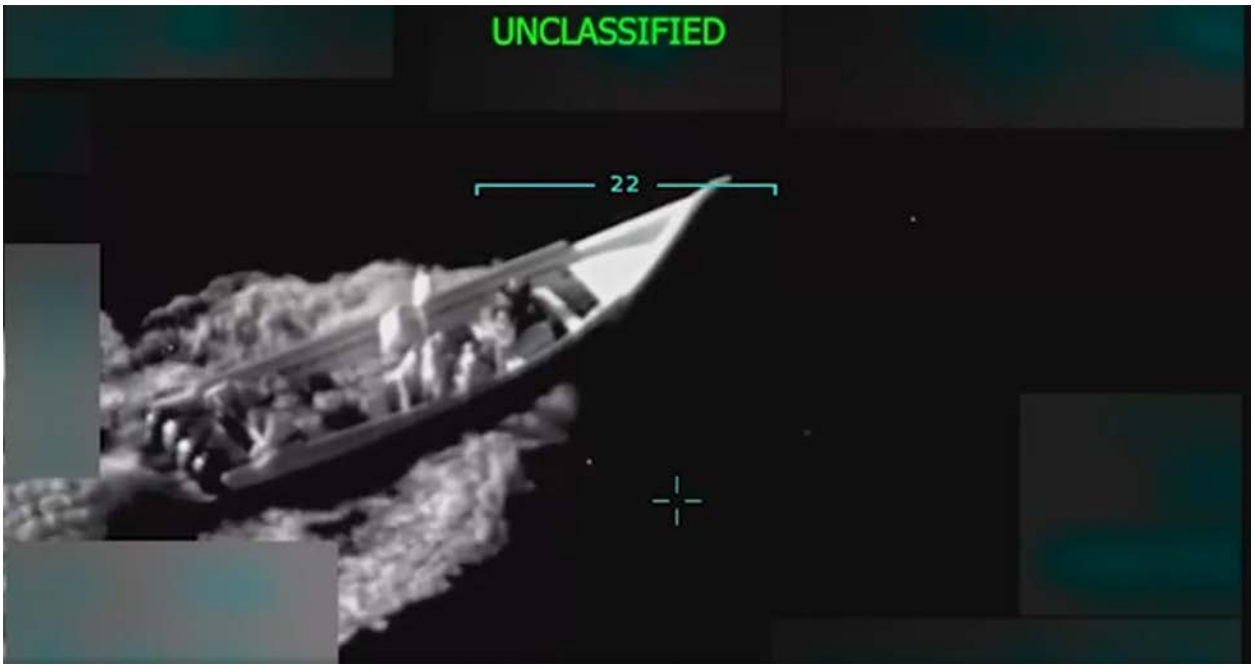
Canada is legally bound to ensure that its export of military goods does not contribute to violations of international law. But because of a decades-old agreement between Canada and the United States, most military goods that Canada sends to its southern neighbour — including the WESCAM sensors used in these operations — bypass the very export controls designed to prevent Canadian technology from contributing to such abuses.

These U.S. airstrikes reveal the consequences of this loophole and signal the immediate need to close it.

Two incidents with a Canadian connection

On September 2, U.S. President Donald Trump announced on Truth Social that U.S. military personnel had carried out an airstrike on a vessel in the Caribbean Sea. He claimed that the boat was being used by the Tren de Aragua cartel to smuggle narcotics from Venezuela into the United States. The post included a 29-second video of the operation.

FIGURE 1



Still image from footage of a U.S. airstrike on a vessel in the Caribbean Sea, September 2, 2025. *Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump.*

Roughly two weeks later, on September 15, Trump shared a second video of another airstrike on a vessel carrying alleged Venezuelan drug smugglers. Project Ploughshares conducted a forensic analysis of the footage of both airstrikes released by President Trump, which revealed distinctive visual fingerprints linking both operations to equipment manufactured in Canada.

This footage displayed critical aspects of L3Harris WESCAM's graphical user interface — the on-screen and often unique and proprietary text, symbols, and reticules visible in the feed of the sensor, which can be seen in both videos posted by President Trump.

FIGURE 2

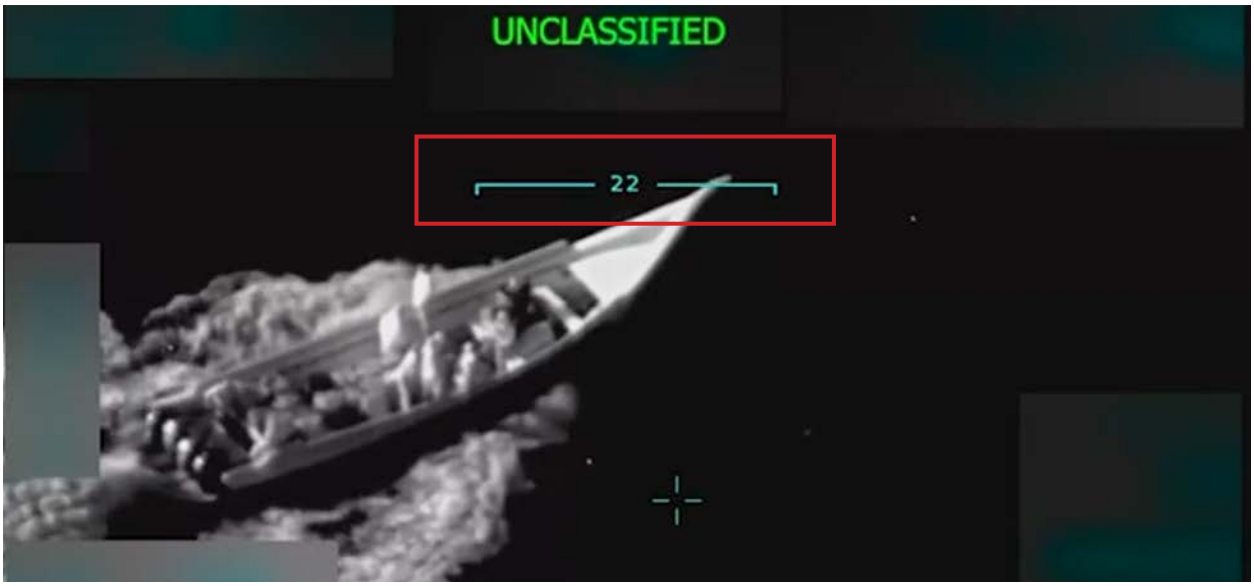
The WESCAM MX-15D EO/IR imaging system. *Image credit: l3harris.com*

L3Harris WESCAM, based in Hamilton, Ontario, is one of the world's leading producers of electro-optical/infrared (EO/IR) sensors. Its MX-Series system of sensors — widely used by militaries, law enforcement, and in search-and-rescue operations — provides real-time surveillance, target tracking, and, in the case of airstrikes, strike coordination capabilities.

Its MX-Series systems, including the MX-15/D, MX-20/D, and MX-25/D units, are used by militaries around the world. The U.S. Department of War, previously known as the U.S. Department of Defense, is among its largest customers; currently, L3Harris WESCAM has a US$380 million contract with the U.S. Army brokered by the Canadian Commercial Corporation, a crown corporation. WESCAM has supplied its EO/IR sensor suite to the U.S. military for more than 25 years.

Aspects of the airstrike footage released by Trump were heavily redacted. Nevertheless, a distinctive feature remained visible in both videos: a light-blue scale bar used to measure the size and distance of visible objects, a trademark element of WESCAM's MX-Series sensor interface. Its presence provided the first major clue linking Canadian-made technology to the two airstrikes.

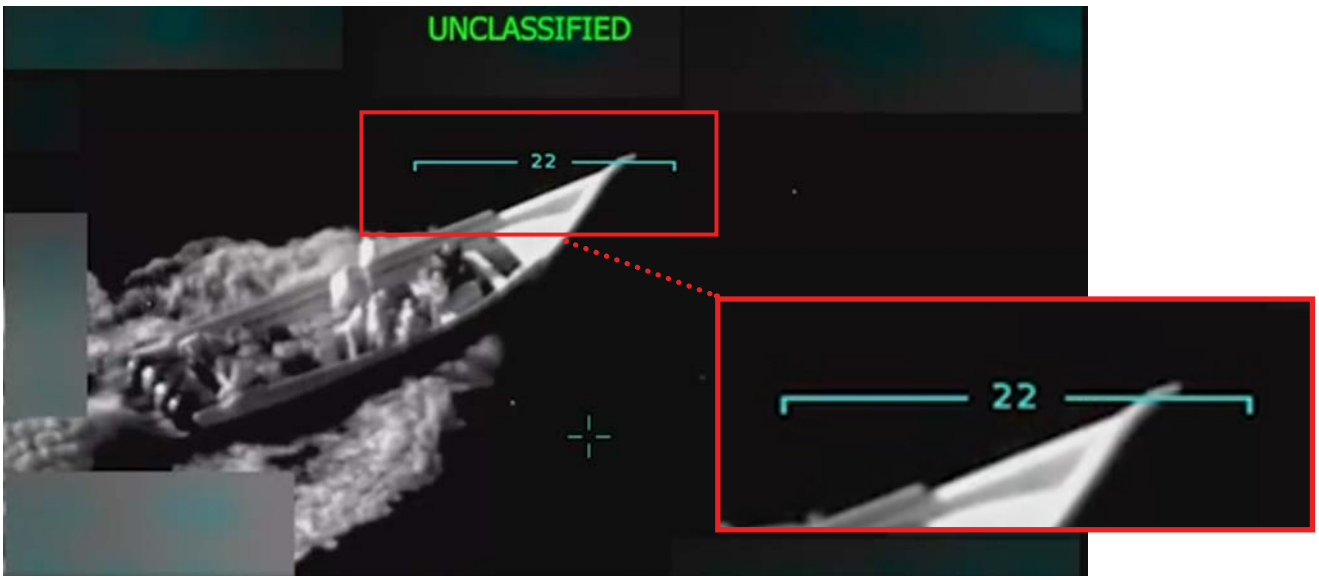
FIGURE 3



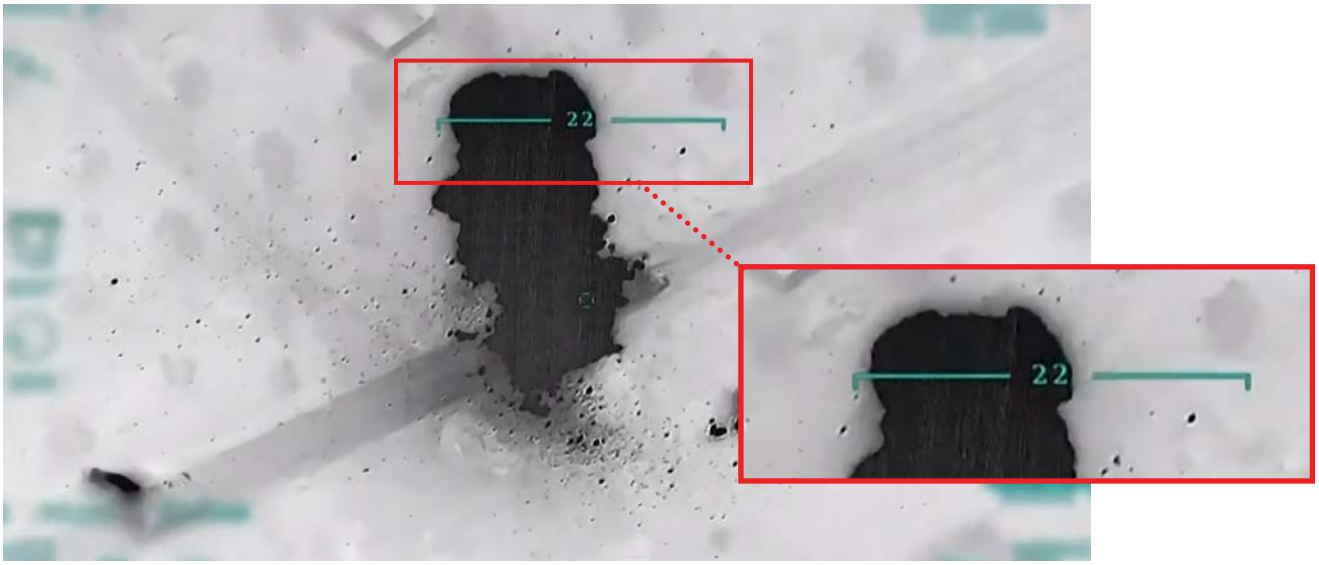
Still image from footage of the September 2, 2025 U.S. airstrike, with WESCAM's proprietary scale bar annotated in red by Project Ploughshares. *Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump.*

Footage from the airstrikes can be compared to that of other operations in which the use of WESCAM MX-Series sensors has been confirmed. For example, Project Ploughshares previously determined that stills of a February 2020 Turkish airstrike in Idlib, Syria, reveal that the operation was carried out with a WESCAM MX-15D sensor. The scale bar is consistent in both images.

FIGURE 4



Still image from footage of the September 2, 2025 U.S. airstrike, with WESCAM's proprietary scale bar annotated by Project Ploughshares. *Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump.*

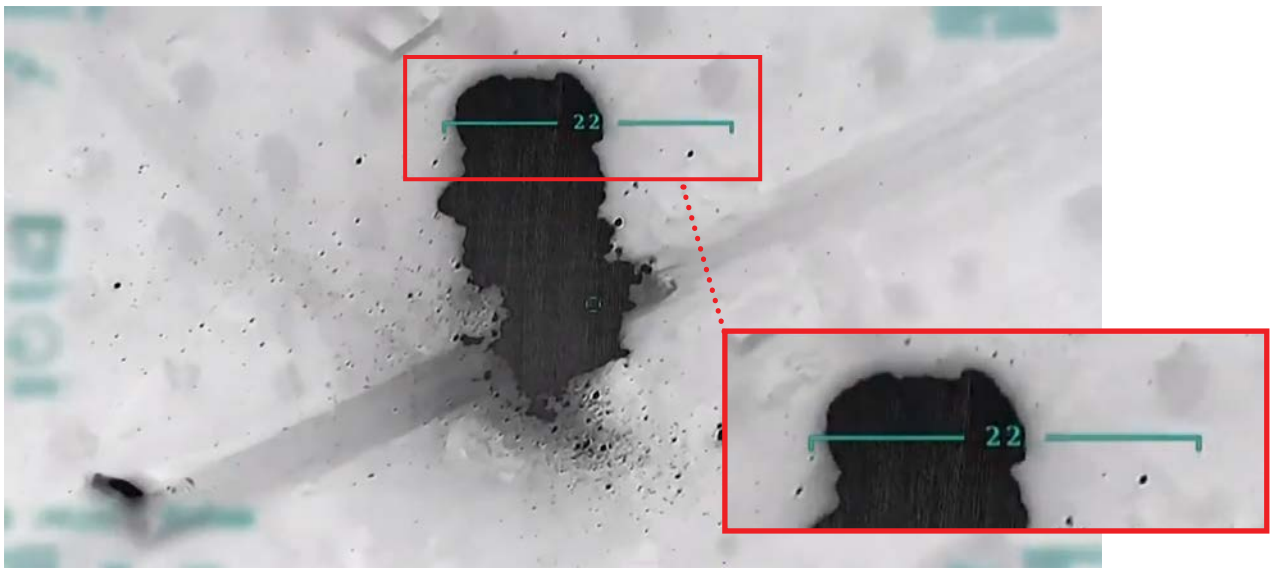


Still image from footage of a Turkish airstrike on Syrian government forces in Idlib, Syria, using a WESCAM MX-15D mounted on a Bayraktar TB2 uncrewed aerial vehicle (UAV), February 2020. *Image credit: AFP/Turkish Defense Ministry, published on YouTube by Voice of America.*

WESCAM's proprietary scale bar also appears in the September 15 airstrike footage, indicating that systems produced by the Canadian manufacturer were used in the second operation.

FIGURE 5

Still image from footage of the September 15, 2025 U.S. airstrike, with WESCAM's proprietary scale bar annotated in red by Project Ploughshares. *Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump.*



Still image from footage of a Turkish airstrike on Syrian government forces in Idlib, Syria, using a WESCAM MX-15D mounted on a Bayraktar TB2 UAV, February 2020. WESCAM's proprietary scale bar annotated in red by Project Ploughshares. *Image credit: AFP/Turkish Defense Ministry, published on YouTube by Voice of America.*

The scale bar also appears in airstrike footage released by the Ukrainian government, showing Bayraktar TB2 UAVs striking Russian targets on Zmiinyi ("Snake") Island in 2022. Ukrainian-operated Bayraktar TB2 UAVs have relied on WESCAM MX-15D EO/IR sensors throughout the war in Ukraine, provided as military aid by Canada since Russia's full-scale invasion began in February 2022.

FIGURE 6

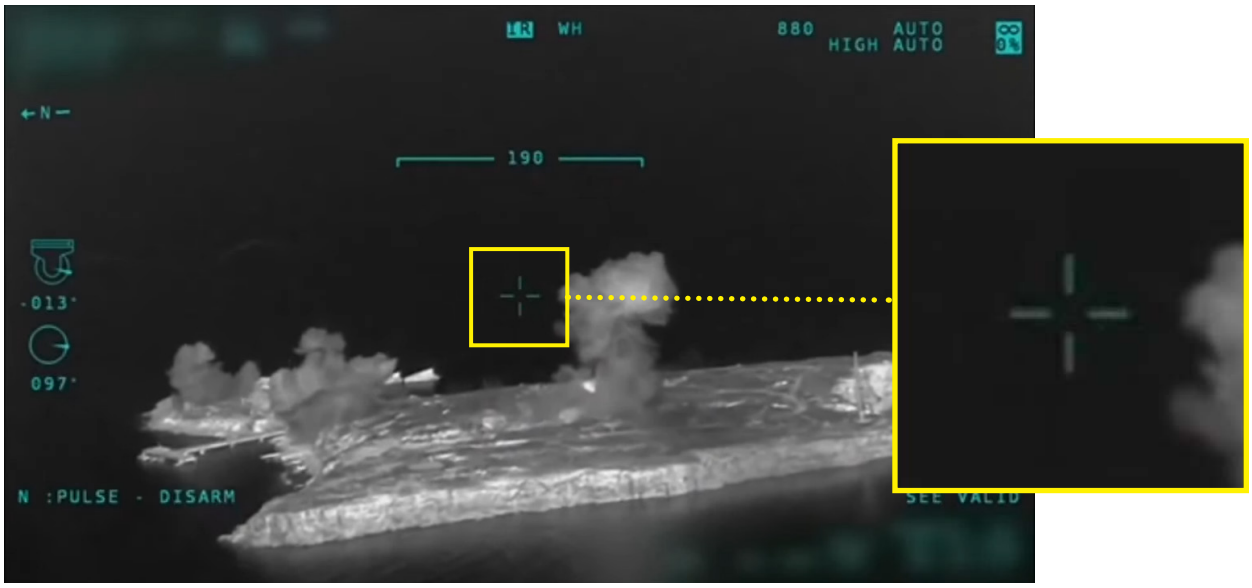
Still image from footage of the September 15, 2025 U.S. airstrike, with WESCAM's proprietary scale bar annotated in red by Project Ploughshares. *Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump.*

Still image from footage of a Ukrainian airstrike on Russian forces on Zmiinyi Island, using a WESCAM MX-15D mounted on a Bayraktar TB2 UAV, May 2022. WESCAM's proprietary scale bar annotated in red by Project Ploughshares. *Image credit: Ukrainian Ministry of Defence, published on YouTube by Zenger.*

As well, the crosshairs that mark the centre of the sensor feed, or "line-of-sight" reticle, match in both the footage of the September 2025 airstrikes and that of the Ukrainian air-strikes in 2022.

FIGURE 7

Still image from footage of the September 15, 2025 U.S. airstrike, with WESCAM's line-of-sight reticle annotated in yellow by Project Ploughshares. *Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump.*



Still image from footage of a Ukrainian airstrike on Russian forces on Zmiinyi Island, using a WESCAM MX-15D mounted on a Bayraktar TB2 UAV, May 2022. WESCAM's line-of-sight reticle annotated in yellow by Project Ploughshares. *Image credit: Ukrainian Ministry of Defence, published on YouTube by Zenger.*

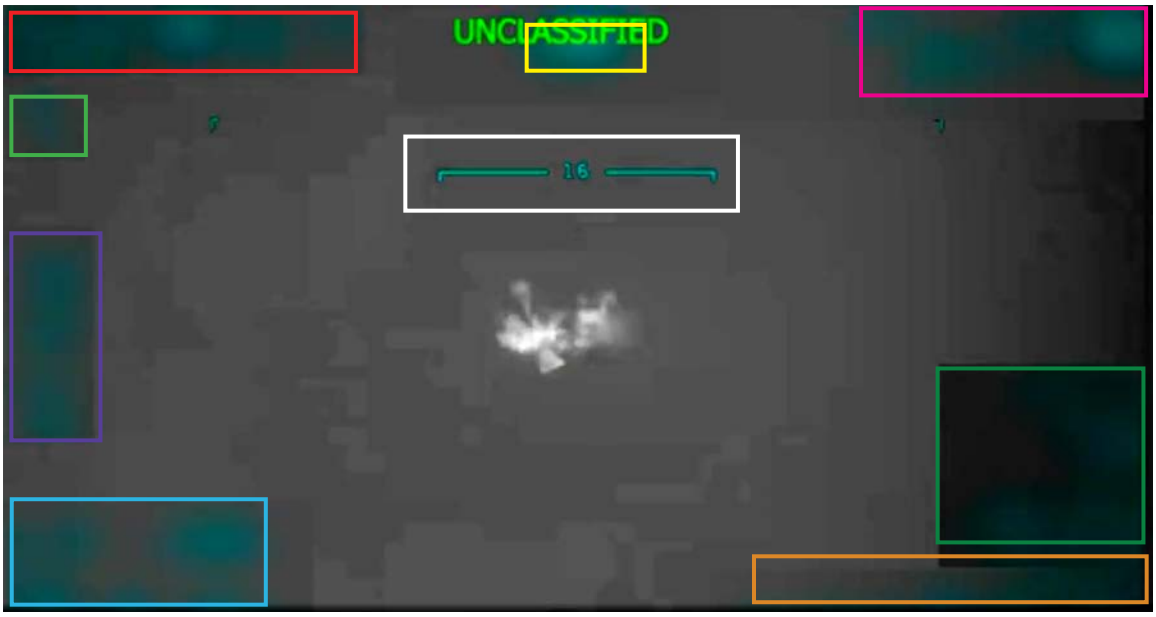
In the airstrike footage from September 2 and 15, it remains unclear whether the MX-Series sensors directly guided the airstrikes using a laser designator or were instead providing surveillance in coordination with other aircraft.

While WESCAM's proprietary scale bar is visible in the videos of both operations, the rest of the interface is largely redacted. This is often done to conceal operationally sensitive informa-

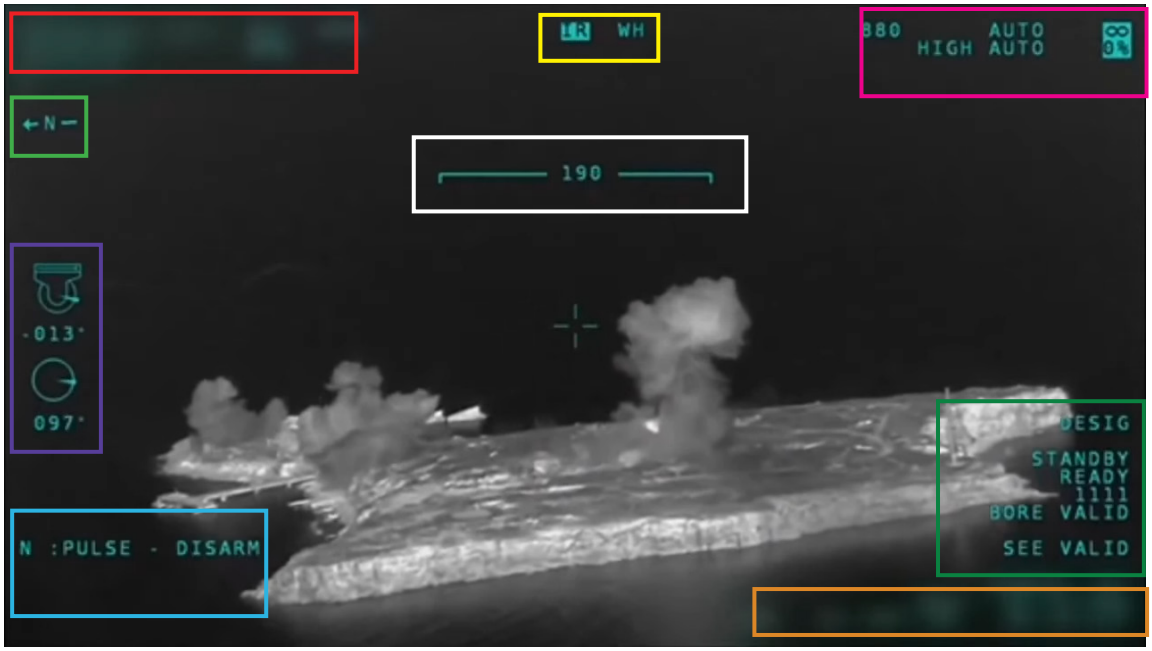
tion, such as the exact time or location of an airstrike. However, key visual markers remain that further reveal that these operations were facilitated with Canadian-made technology.

For example, the blurred elements (Figure 8, top) from the September 2 airstrike match those of the largely unredacted footage (Figure 8, bottom) of Ukrainian airstrikes on Zmiinyi Island.

FIGURE 8



Still image from footage of the September 2, 2025 U.S. airstrike, with blurred elements annotated by Project Ploughshares. This image was recompressed from the original to sharpen redacted elements. *Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump.*

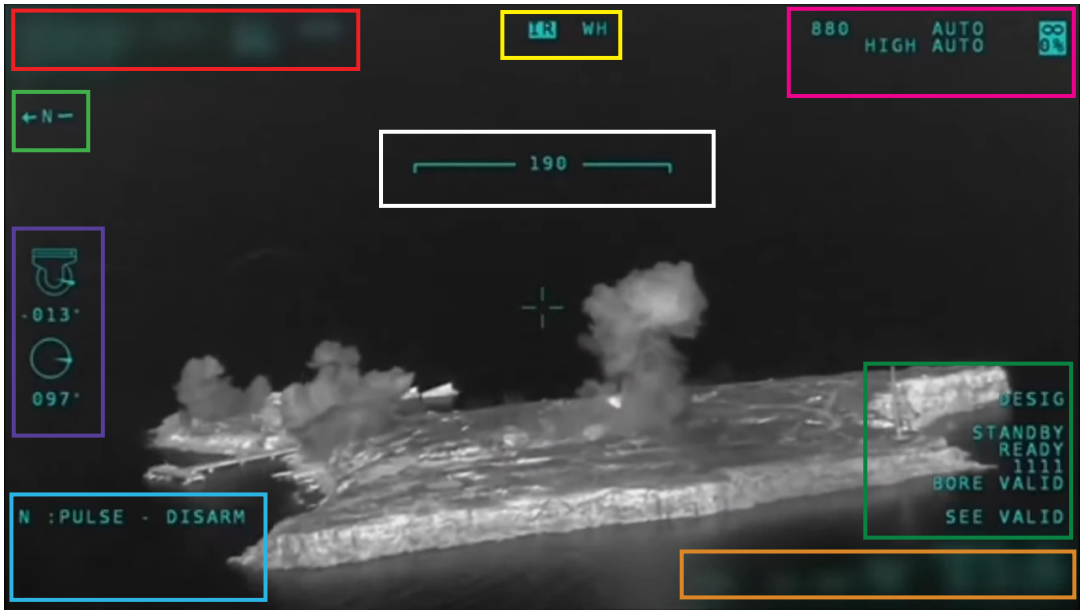


Still image from footage of a Ukrainian airstrike on Russian forces on Zmiinyi Island, using a WESCAM MX-15D mounted on a Bayraktar TB2 UAV, May 2022. Visible elements of WESCAM's proprietary EO/IR interface annotated by Project Ploughshares. *Image credit: Ukrainian Ministry of Defence, published on YouTube by Zenger.*

The blurred interface elements visible in the September 15 airstrike also correspond to the WESCAM MX-Series interface visible during Ukrainian airstrikes on Zmiinyi Island in 2022.

FIGURE 9

Still image from footage of the September 15, 2025 U.S. airstrike, with blurred elements annotated by Project Ploughshares.
Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump.



Still image from footage of a Ukrainian airstrike on Russian forces on Zmiinyi Island, using a WESCAM MX-15D mounted on a Bayraktar TB2 UAV, May 2022. Visible elements of WESCAM's proprietary EO/IR interface annotated by Project Ploughshares.
Image credit: Ukrainian Ministry of Defence, published on YouTube by Zenger.

These interfaces are dynamic and, depending on the mission and operator's actions, can display different things at different times. Only rarely, then, will two still frames taken from different operations match perfectly.

See, for example, the two bottom-left elements highlighted in light blue in Figure 9, with blurred elements from the September 15 footage differing slightly from the unredacted elements visible in the Ukrainian airstrike on Zmiinyi Island. However, other interface elements distinctive to WESCAM's sensor interface are visible in both stills, including the current "video in control" marker (in yellow), elements indicating turret orientation (in purple), and the north indicator (in light green), among others. Taken together, analysis of the footage from September 2 and 15, when compared with other instances in which WESCAM sensors were previously confirmed to have been used, reveals consistent patterns that allow for the positive identification of the manufacturer of this technology.

A third video

A third video, released by President Trump on September 19, shows another U.S. airstrike against a small vessel in the Caribbean Sea. Three people were reportedly killed, moments after they were seen tossing packages overboard.

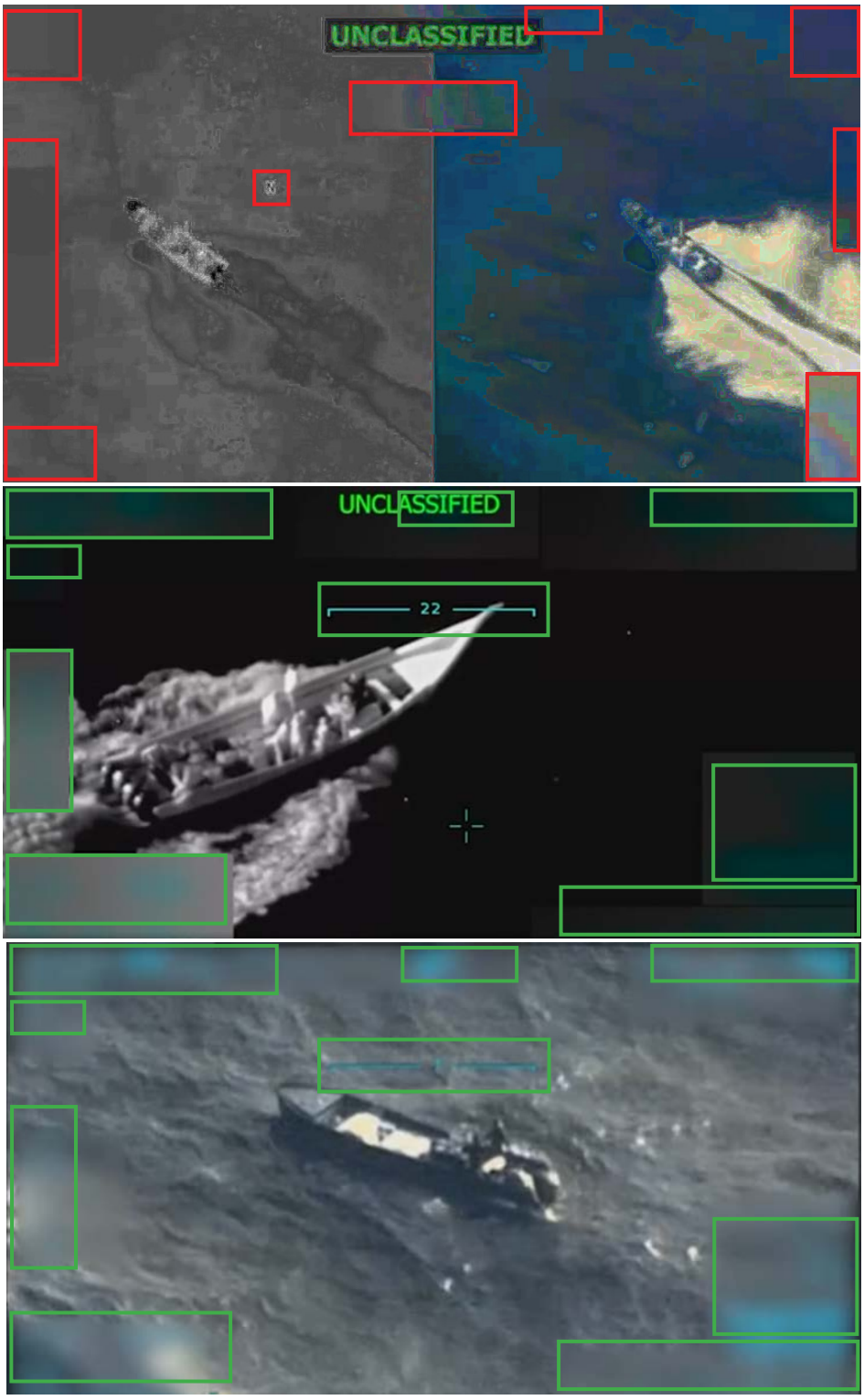
This footage (Figure 10) is markedly different from that of the September 2 and 15 operations, missing the visual features distinctive to the WESCAM MX-Series interface.

FIGURE 10

Still image from footage of a U.S. airstrike on a vessel in the Caribbean Sea, first appearing online September 19, 2025. *Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump.*

Figure 11 includes a still from the September 19 airstrike (top) with EO/IR interface elements diverging from earlier airstrike footage annotated in red. The two remaining images in Figure 11 are stills from the September 2 (middle) and September 15 (bottom) airstrikes, with elements proprietary to the L3Harris WESCAM EO/IR interface annotated in green.

FIGURE 11



(Top) Still image from footage of a U.S. airstrike on a vessel in the Caribbean Sea, first appearing online September 19, 2025. Image has been recompressed by Project Ploughshares to emphasize redacted elements of the sensor interface, which are annotated in red. *Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump.*

(Middle) Still image from footage of a U.S. airstrike on a vessel in the Caribbean Sea, September 2, 2025. Distinctive elements of WESCAM's sensor interface are annotated in green by Project Ploughshares. *Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump.*

(Bottom) Still image from footage of a U.S. airstrike on a vessel in the Caribbean Sea, September 15, 2025. Distinctive elements of WESCAM's sensor interface are annotated in green by Project Ploughshares. *Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump."*

Another notable distinction is the presence of a small “N” symbol hovering above the target vessel (Figure 12, annotated in red), indicating the direction of north relative to the sensor’s position. In contrast, WESCAM’s MX-Series interface uses a fixed north indicator (Figure 12, annotated in green) that has a constant position in the top-left corner of the display.

FIGURE 12

Still image from footage of a U.S. airstrike on a vessel in the Caribbean Sea, first appearing online September 19, 2025. North indicator annotated in red by Project Ploughshares. *Image credit: U.S. Department of War, published on Truth Social by U.S. President Donald Trump.*

Still image from footage of a Ukrainian airstrike on Russian forces on Zmiinyi Island, using a WESCAM MX-15D mounted on a Bayraktar TB2 UAV, May 2022. WESCAM’s proprietary north indicator annotated in green by Project Ploughshares. *Image credit: Ukrainian Ministry of Defence, published on YouTube by Zenger.*

From this, it appears that more than one type of EO/IR system has been used in the three operations. The variation in sensor displays also strengthens the attribution of the footage recorded on September 2 and 15 to WESCAM's MX-Series sensors by showing how characteristic interface features differ among manufacturers.

September airstrikes part of wider campaign?

According to President Trump, the recent U.S. airstrikes in the Caribbean targeted Venezuelan drug smugglers ferrying narcotics to the United States. The targets of the September 2 attack were allegedly members of Tren de Aragua, a cartel designated a Foreign Terrorist Organization by the United States and a terrorist entity by Canada. American officials have not yet assigned an affiliation to the three individuals reportedly killed on September 15 or the three reportedly killed in the footage published on September 19.

It is also not yet clear how American officials determined that the targeted vessels were affiliated with Venezuelan cartels or that they were carrying narcotics destined for the United States. Officials from the government of the Dominican Republic later stated that they had recovered 377 packages of cocaine from the wreckage of the boat that was struck on September 15.

The airstrike campaign has seen significant mobilization of U.S. military assets, including F-35 Joint Strike Fighters and MQ-9 Reaper UAVs, which have been photographed at José Aponte de la Torre Airport in Puerto Rico (previously known as Naval Station Roosevelt Roads).

Some of the aircraft recently stationed on the island are known to have been commonly equipped with WESCAM MX-Series sensors, such as the P-8A Poseidon. However, it is not yet clear if Puerto Rico served as the staging ground for any of the September airstrikes, or if any of the aircraft currently stationed at José Aponte de la Torre Airport were directly involved. American officials have also not officially stated what type or types of aircraft were used in the strikes.

The September 2025 airstrikes also occurred during a general pivot by the U.S. military to the Caribbean, likely indicating a longer-term, sustained presence in the region. While President Trump has described the operations as targeting drug cartels allegedly linked to Venezuelan President Nicolás Maduro, former U.S. officials have suggested that the strikes are part of a larger campaign to exert U.S. pressure on the Venezuelan government.

This past September 23 at the UN General Assembly, President Trump threatened additional airstrikes. This, coupled with the U.S. Department of War's demonstrated willingness to carry out such operations, suggests that further airstrike operations employing Canadian technology could occur in the region.

Caribbean airstrikes "extrajudicial killings"

The September 2 incident spurred immediate concern about the legality of U.S. actions in the Caribbean.

Militaries are legally permitted to attack enemy combatants during armed conflict. However, the alleged cartel members targeted in the airstrikes were not uniformed combatants, they were not at war with the United States, and the airstrikes themselves took place outside any theatre of combat. For these reasons, legal experts and humanitarian monitors have described the airstrikes as extrajudicial killings, drawing parallels to earlier instances of the U.S. use of force outside combat zones during the War on Terror. These findings hold even if the vessels were carrying narcotics or operated by cartels because the individuals on board were civilians, entitled to due process if suspected of criminal activity.

In the days following the September 15 airstrike, Human Rights Watch stated that "[t]he US military's use of lethal force against suspected drug traffickers in these two strikes violated international human-rights law," and noted that, even though the alleged cartel members did not pose an imminent threat to life, nonlethal alternatives to interdict the vessels were not attempted.

Other criticisms at the international level came from the UN Special Rapporteur on extrajudicial, summary or arbitrary executions, in concert with two other UN human-rights experts. They concluded that the strikes not only violated the right to life but also breached the international law of the sea. Their statement, issued the day after the September 15 airstrike, bluntly declared that "[i]nternational law does not allow governments to simply murder alleged drug traffickers."

Canada's unchecked arms to the United States

In September 2019, Canada acceded to the United Nations Arms Trade Treaty (ATT), the first multinational instrument that places comprehensive controls on the international trade and transfer of conventional arms. As per the Treaty's text, Canadian officials are legally obligated to ensure that Canada's export of weapon systems, including WESCAM MX-Series sensors, do not contribute to serious breaches of international law, including violations of international human-rights law.

To meet these obligations, States Parties to the ATT conduct case-by-case risk assessments to evaluate whether a proposed arms transfer could be used in such abuses, as set out in one of the Treaty's operative articles, Article 7.

Canada's export of L3Harris WESCAM sensors has previously drawn criticism. In 2020, Project Ploughshares revealed that Türkiye had diverted WESCAM EO/IR systems to several conflict zones in which human-rights abuses had been reported. These realizations contributed to Canadian officials ceasing these exports to Türkiye, in line with Canada's ATT obligations.

However, when it comes to Canada's arms trade with the United States, Canada's regulatory system has a fundamental flaw.

The U.S.-Canada Defence Production Sharing Agreement, signed in the late 1950s, exempts most Canadian military exports to the United States from the need for export permits. This regulatory weakening has resulted in a carve-out that exempts the vast majority of weapons and military components sent to the United States by Canada — including the WESCAM sensors identified in the September 2 and 15 airstrike footage — from being subject to the human-rights risk assessments required for transfers to any other country, contrary to the provisions of the ATT.

Human-rights oversight of arms exports is not a bureaucratic formality but a substantive safeguard that federal officials use to ensure that Canadian weapons systems are not employed in serious violations of international law. But because U.S.-destined military goods generally do not require export permits, even if Canadian officials determined that a proposed arms export was inconsistent with Canada's ATT obligations, there would be no regulatory mechanism to deny it.

This glaring loophole is a central weakness of Canada's regulatory regime, particularly considering that the United States is, in most typical years, the single largest customer for Canadian weapons systems. The exemption has drawn renewed scrutiny over the past two years, as Canada has continued to indirectly supply weapons to Israel via the United States despite the ongoing humanitarian crisis in Gaza.

Canada should not only close this loophole to comply with the ATT but also to establish the necessary checks and balances to prevent Canadian technology from being involved in future unlawful uses of force. Such an action is urgently needed given the current U.S. administration's increasingly belligerent posture on the international stage, particularly in the Caribbean, which could result in Canadian technology being utilized in further unlawful operations.

Achieving accountability

The September airstrikes in the Caribbean underscore the profound accountability gap in Canada's arms control regime, highlighting how the unchecked flow of Canadian arms to its southern neighbour can facilitate the unlawful use of force.

Given the current U.S. administration's increasingly aggressive actions on the world stage, the Canadian government should act to close the flagrant loophole that undermines Canada's compliance with the ATT. Doing so would also provide the necessary oversight and regulatory instruments to ensure that Canadian technology does not play a role in further violations of international law — in the Caribbean, or elsewhere.

Project Ploughshares is a Canadian peace research institute with a focus on disarmament efforts and international security specifically related to the arms trade; emerging military and security technologies; nuclear weapons; the protection of civilians; outer space; and the intersection of climate, peace, and security.

For more information please visit: www.ploughshares.ca.