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Canada's Genocide Jet Builders Stelia and Other Key Suppliers in the Global F-35 Supply Chain

This report, prepared by the Researchers Against Genocide working group of Science for the People Canada, provides an analysis of six key Canadian companies making critical parts for the F-35 fighter/bomber jets Israel uses in military operations across Gaza, Lebanon, Syria, Yemen, Qatar and Iran.



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Key Takeaways

- This report exposes the six Canadian companies supplying key parts for Israel's F-35 genocide jets.
 - Asco (BC)
 - Magellan (Manitoba)
 - Ben Machine (Ontario)
 - Gastops (Ontario)
 - Héroux-Devtek (Quebec)
 - Stelia (Nova Scotia)
- These companies recently helped build six new F-35s for Israel and five more are on the way.
- These six suppliers are so vital that stopping the flow of parts from them would impair the just-in-time production of this key weapon that Israel uses to commit war crimes and genocide.
- Israel's bombing of Gaza is the most intense bombing it has ever conducted, and Israel is using the F-35 against Gaza at the highest pace the weapon has ever been used, disproportionately harming Palestinian children.
- Lockheed Martin has pioneered a brand new maximum bombing capacity uniquely for Israel's F-35s, called "Beast mode", quadrupling the amount of bombs it can carry.
- The report includes an in-depth study of Stelia: every F-35 bombing Gaza has Stelia stealth panels, as the CEO recently admitted; stealth panels are key to allowing Israel's F-35s to evade air defences and bomb Yemen, Lebanon, and Iran.

Executive Summary

Canada's Vital Parts for Israel's Most Advanced non-Nuclear Weapon

The F-35 fighter jet is the most advanced non-nuclear weapon in Israel's arsenal; their F-35 air strikes on Gaza are the most intensive aerial bombing campaign in the operational history of the aircraft. Israel's systematic use of heavy munitions that have a disproportionate impact on children forms part of its overall genocidal pattern of conduct. In light of its leading role in the annihilation of Gaza's infrastructure and extermination of its population, the F-35 should be regarded as a "genocide jet." Every F-35 genocide iet used to demolish Gaza contains millions of dollars in Canadian parts.

This report focuses on six companies making critical F-35 parts in Canada: Héroux-Devtek, Gastops, Magellan, Asco, Ben Machine, and Stelia, including an in-depth case study of the latter. Stopping the supply chain of these Canadian parts would at least slow down, if not completely stop, the just-in-time production of the F-35. Six new F-35s have been delivered to Israel in the last 18 months and more are being built for delivery in the near future.

Ongoing Bombardment: As retired Israeli Air Force pilots themselves describe their aircraft as "deadly killing machines" that are used to deliberately target Palestinian civilians, Canadian-made components continue flowing to maintain Israel's unprecedented bombing operations against Gaza.

Case study — Stelia Aerospace:
Stelia Aerospace North America
Inc., based in Lunenburg, Nova
Scotia, manufactures composite
fuselage panels with radar-absorbing properties essential for
F-35 stealth operations. These
stealth capabilities allow Israel
to bomb neighbouring countries
— Yemen, Syria, Iran, Lebanon,
and, most recently, Qatar — with
impunity.

Genocide Continues with Canadian Components

Scale of Canadian Complicity:
Every F-35 used by the Israeli Air
Force to bomb Gaza — including at least six planes delivered since October 2023 — contains \$2.3 million USD (approximately \$3.2 million CAD) of Canadian parts. Over \$110 million USD (approximately \$152 million

"Every F-35
used by the
Israeli Air Force
to bomb Gaza
contains
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of Canadian
parts."

CAD) in Canadian components enable Israel's F-35 bombing fleet. The six companies covered in this report provide vital components that keep Israel's genocide jets flying. Despite vague and shifting claims by politicians, the government has taken no meaningful action to restrict this flow of components. Canada is part of a six-nation "axis of genocide" arming Israel.

Canada's leverage over the F-35 program: Two Canadian F-35 parts makers — Gastops and Héroux-Devtek - are solesource suppliers, meaning there is no readily available replacement for their F-35 components. An Ontario company, Ben Machine, is the only North American source for a key part of the F-35 actuation system, facilitating flight. Two more Canadian companies are high percentage suppliers: Asco supplies one-quarter of the jet's titanium bulkheads, the single largest piece of the F-35, and Magellan makes half of its horizontal tail. fins. Because Lockheed Martin relies on a "just-in-time" supply chain for the F-35, stopping

the supply of parts from any of these companies would seriously impair the company's ability to produce and maintain the aircraft, including those operated by Israel.

> "Israeli F-35s have logged over 15,000 flight hours since October 2023."

The Human Cost: F-35 "Beast Mode" Operations

Unprecedented Bombing Intensity: Israel operates F-35s at the highest tempo globally, each aircraft conducting 2-4 daily sorties in rapid bombing runs from Nevatim Air Base to Gaza. Israeli F-35s have logged over 15,000 flight hours since October 2023. By January 30, 2024, the IDF reported it had bombed 29,000 sites in Gaza, "mostly using F-35s and F-16s," more than any other bombing campaign in its history.

"Beast Mode" - Maximum Killing Capacity: Since October 2023, Lockheed Martin has introduced a new F-35 configuration which allows Israel's F-35s to carry four external 2,000-lb bombs, dramatically increasing their destructive capacity. This new configuration, tested on Palestinian civilians and now marketed by Lockheed Martin under the name "Beast Mode." can only be used against targets with no air defence, and Israel is the only air force using this design. Lockheed had theorized "Beast Mode" as early as 2017, but only brought it to fruition during the current Gaza bombing, working with Israel to test the new F-35 configuration on Palestinians. This report is the first to highlight the newly developed "Beast Mode" maximum bombing capacity.

Documented War Crimes: The Israeli Air Force used F-35s to carry out the July 13, 2024 bombing of the al-Mawasi designated "humanitarian zone", dropping at least three 2,000-lb bombs on tents without warning. This attack killed 141 Palestinians and wounded 300 more. Less than a week later. Israel used its F-35s to bomb port and oil facilities in Yemen, killing dozens of civilians and injuring over one hundred, many with severe burns. The Israeli Air Force described this latter attack as an "amazing and emotional" operation and the crews who carried it out as working "with a sparkle in their eyes."

Impact on Children: The physical effects of these bombs are devastating. Former U.S. Air Force Combat Controller J.P. Alfred explains the physics of Israeli jets dropping large bombs near children:

The over-pressure from the bomb [...] is so massive that that small frame of the child is rattled so much that their rib cage collapses. The alveoli inside of their lungs burst and there's no place for the pressure to escape [...] your head explodes.

Israeli forces have surveillance videos showing exactly how many people, including children, are in an area before striking. The ICJ considers the "victimization of children" as evidence of genocide.

Medical Testimony: Palestinian-American doctor Thaer Ahmad described the aftermath of an F-35 strike: "About 15 to 20 minutes later, you get an influx of these trauma patients. [...] I remember one of the nights that a house was hit and a family brought in 10 people and three of them were young girls between the ages of 10 and 14; all of them [were] dead on arrival [...]."

Other Countries Recognized the Risk: As early as 2013, Japan identified that "F-35s that use Japanese parts may be exported to Israel," violating Japan's ban on parts going to

nations "likely to be involved in international conflicts." Japan chose not to supply parts to the global F-35 program to avoid complicity in illegal wars. Canada would have been aware of this risk assessment but chose instead to expose itself to complicity in war crimes.

The F-35 is a Genocide Jet

In light of these consistent patterns in Israel's use of the F-35, its role as the sole user of the jet's maximum bombing capacity against undefended population, and the openly-expressed genocidal intent of its leaders, the F-35 should be regarded as a "genocide jet." Any Canadian company providing parts, maintenance, or any other contribution to Israel's F-35 fleet is complicit in genocide, as is any Canadian government official allowing such contributions to be made.

Conclusion and Specific Recommendations

The Canadian government must take immediate action to stop the flow of all weapons components to Israel by imposing a full arms embargo on weapons and parts for end-use by Israel.

This must include cutting off the supply of Canadian-made F-35 parts to Israel via Lockheed Martin's global supply chain.

The time for government excuses has ended. The evidence is clear: Canada re-

mains an active participant in genocide, and only immediate **and comprehensive** action can stop this complicity. Until the government lives up to its own commitments under international law, the obligation to stop Canadian companies from arming genocide will fall to the people.

In light of the Canadian government's failure to fulfill its own commitments under international law, it falls to the public to implement a "People's Arms Embargo" to the best of its ability.

Introduction

his report, prepared by the Researchers
Against Genocide working group of Science for the People Canada, provides an analysis of six key Canadian companies making critical parts for the F-35 fighter/bomber jets Israel uses in military operations across Gaza, Lebanon, Syria, Yemen, Oatar and Iran.

Every F-35 used by Israel to demolish Gaza contains millions of dollars in Canadian parts, manufactured by dozens of companies across Canada. Despite misleading or outright dishonest claims from politicians,

the Canadian government **has done nothing** to stop the supply of Canadian parts to the global supply chain building and maintaining Israel's F-35 jets.

This report documents the role of the F-35 in killing and "[c]ausing serious bodily or mental harm" to Palestinians and in "[d]eliberately inflicting conditions of life calculated to bring about the physical destruction"² of the Palestinian people in Gaza. In light of these consistent patterns in Israel's use of the F-35 and the openly-expressed genocidal intent³ of its leaders, **the F-35 should**

be regarded as a "genocide jet." Any Canadian company providing parts for Israel's F-35 fleet is complicit in genocide, as is any Canadian government official allowing these exports.

The report is structured as follows: After a short background section introducing Science for the People Canada, **Section I** presents brief overviews of five Canadian companies supplying important components of the F-35s used to bomb Gaza. **Section II** investigates one additional company, Stelia Aerospace North America, in greater detail. **Section III** explains

the importance of the F-35 to Israel's military strategy. Section IV presents the new F-35 configuration introduced since October 2023 specifically to allow Israel's planes to carry more bombs, dubbed "Beast Mode" by Lockheed Martin. Section V analyzes the unprecedented scale of Israel's aerial bombardment of Gaza and the clear evidence of war crimes committed in the course of that bombardment. Finally, the conclusion presents actions to be taken urgently to end Canadian complicity in Israel's genocide against the Palestinian people in Gaza.

- See the Arms Embargo Now coalition's "F-35 Supplier Map" at F-35 Day of Action.
- 2 Convention on the Prevention and Punishment of the Crime of Genocide, Art. II (a), (b), and (c).
- 3 Statements of Genocidal Intent, Law for Palestine.

Background — What is Science for the People Canada?

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community organization that first emerged in 1969 from the anti-war movement in the US. It aimed to develop a theory and practice of science both by and for the people, in opposition to a science directed by corporate greed and imperialism. In 2015, a new generation of scientists revitalized SftP with the support of many of its original members. Since 2019, SftP has published a magazine with the same name.

SftP has been <u>active in Canada</u> since 2022 and now has local chapters in Montreal, Ottawa, and Toronto, as well as members in other cities across the country.

In January 2025, the Researchers Against Genocide working group of SftP Canada published the report <u>It Takes a Village to Kill a Child</u>, documenting Canadian companies facilitating war crimes and genocide in Gaza. The current report is the second in the Researchers Against Genocide series.

Section I — Six Critical Canadian Suppliers for Israel's Genocide Jets

There are six Canadian companies making parts so important to the F-35 supply chain that if they were not shipped, it would seriously impair or stop the just-in-time production and maintenance of F-35s.

From west to east, these critical suppliers are:

- Asco (Delta, British Columbia),
- Magellan (Winnipeg, Manitoba),
- Ben Machine (Vaughan Ontario),
- Gastops (Ottawa, Ontario)
- Héroux-Devtek (Laval and Longueuil, Quebec),
- Stelia (Lunenburg, Nova Scotia).

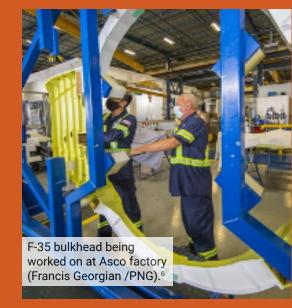
If these companies were to stop supplying parts, it would take a considerable amount of time for Lockheed to source another company elsewhere to tool up to replace the key parts, especially when the part is patented by the Canadian company, as in at least two of the cases described below. These solesource companies in particular

are "Achilles' heels" for the F-35, giving Canadian workers and civil society considerable leverage over the program.

A detailed case study of Stelia will be presented in **Section II** below. This section provides a brief overview of each of the other five companies and their roles in the F-35 program.

ASCO

Based in Delta, British Columbia, ASCO Aerospace Canada Ltd. (also written "Asco") is one of four manufacturers of titanium bulkheads for the F-35. These bulkheads connect the wings and fuselage, and constitute "[t] he single largest structural component," of the plane. Asco also provides "[t]he critical longeron structure and aluminum frames for the forward fuselage." 5



Magellan

Magellan Aerospace's facility in Winnipeg, Manitoba, is the F-35's "largest Canadian structural supplier." Magellan produces half of all the tail fins for the F-35A, the variant that Israel flies, and was the subject of an

- 4 Strategic Aerospace and Defence Initiative: Program Highlights 2011-2012, Industry Canada, Feb. 2013, page 17.
- 5 Lockheed Martin recognizes Canadian suppliers for F-35 Lightning II, Skies Mag, May 30, 2013.
- 6 COVID crashed civilian aviation, military contracts cushioned ASCO, Vancouver Sun, Aug. 5, 2021.
- 7 First Ship Set of Magellan Aerospace F-35A Horizontal Tail Assemblies Installed, Magellan Aerospace (Newswire), Oct. 16, 2013.
- 8 <u>Winnipeg plant one of largest F-35 parts producers in Canada, Canadian Dimension</u>, Nov. 15, 2024.
- 9 Magellan to double F-35 tail assemblies for BAE Systems, Aerospace Manufacturing and Design, May 15, 2019.



F-35 tail assembly (Magellan).10

in-depth investigation by researcher James Wilt published in *Canadian Dimension* in 2024.¹⁰

Ben Machine

Ben Machine Products Co. Inc., of Vaughan, Ontario, recently boasted of its "[p]ivotal role in the global aerospace supply chain," for the F-35.¹¹ According to Ben Machine CEO Michael lacovelli, "[t]he engineering and production of highly complex dip-brazed enclosures led Ben Machine to become a partner on the development and production of the actuation

systems for Lockheed Martin's F-35 aircraft."¹² (The actuation system is responsible for powering the movements of flaps and other components that allow the F-35 to manoeuvre during flight.) lacovelli claims that Ben Machine is "[t]he only company in North America which can deliver the required specifications," for the F-35. ¹³

Gastops

Ottawa-based company Gastops "designs and manufactures unique sensors for the Pratt & Whitney F-135 engine which powers all F-35 aircraft." By providing "[e]ngine bearing and



Gastops MetalSCAN MS1324 oil debris sensor (Gastops).¹⁸

blade health information,"¹⁶ these sensors help streamline maintenance and maximize the time the plane is available to conduct military operations.¹⁷ "Keeping aircraft engines humming is a dirty job [...] but the folks at Gastops are happy to do it," according to the *Ottawa*



Diagram of Canadian contributors to the F-35.¹⁴ Modified to highlight Ben Machine in upper left (Lockheed Martin/Ben Machine).

- 10 <u>Winnipeg plant one of largest F-35 parts producers in Canada, Canadian Dimension</u>, Nov. 15, 2024.
- 11 <u>Ontario's Pivotal Role in the Global Aerospace Supply Chain, Ben Machine, May 2, 2025</u>
- 12 <u>Global F-35 Aircraft Supported by Canadian Innovation</u>, WhatsYourTech.ca, Dec. 2, 2021.
- 13 <u>Global F-35 Aircraft Supported by Canadian Innovation</u>, *WhatsYourTech.ca*, Dec. 2, 2021.
- 4 Ontario's Pivotal Role in the Global Aerospace Supply Chain, Ben Machine, May 2, 2025.
- 5 Lockheed Martin recognizes Canadian suppliers for F-35 Lightning II, Skies Mag, May 20, 2013.
- 16 Lockheed Martin recognizes Canadian suppliers for F-35 Lightning II, Skies Mag, May 20, 2013.
- Ottawa-based company is key to keeping Israeli warplanes bombing Gaza, *The Breach*, Sep. 12, 2024.
- 18 <u>MetalSCAN MS1000 Oil Debris Monitoring System</u>, Gastops, nd. See also the description of the system in <u>Application Guide: F-35 Lightning II</u>, Gastops, nd.

Business Journal. 19 Gastops is a sole-source supplier of three patented sensors in each Israeli F-35: "This is technology that nobody else has,"20 as the executive vice-president of the Aerospace Industries Association of Canada bragged. According to one Canadian expert on arms exports, Gastops, "Can be seen as an Achilles' heel," for organizations hoping to interrupt the flow of components, meaning that preventing it from exporting parts, "would interrupt the procurement chain and interrupt the production of F-35s."21

Héroux-Devtek

Héroux-Devtek makes F-35 landing gear uplocks in Laval, near Montreal. These uplocks appear to be a patented solesource component. At the onset of the F-35 program in 2010, Héroux-Devtek's CEO told a parliamentary committee that he was flying to Fort Worth, Texas every month to meet with Lockheed about his company's role in the F-35, testifying that, "the uplocks, which are latching devices for airplanes, were designed by engineers in Lonqueuil. So the intellectual property for these products belongs to us."22 In 2024, Héroux-Devtek reported that its first quarter sales had increased by 20%, due in part to "higher deliveries for the Lockheed Martin F-35 program."²³



Héroux-Devtek's F-35 landing gear door uplock mechanism (Screengrab/Lockheed Martin).²⁴

- 19 Ottawa's Gastops gaining altitude with high-tech aircraft maintenance tools, Ottawa Business Journal, May 31, 2017.
- 20 Ottawa's Gastops gaining altitude with high-tech aircraft maintenance tools, Ottawa Business Journal, May 31, 2017.
- 21 Ottawa-based company is key to keeping Israeli warplanes bombing Gaza, The Breach, Sep. 12, 2024.
- Evidence of Gilles Labbé (President and CEO of Héroux-Devtek) to the House of Commons Standing Committee on National Defence, Dec. 9, 2010. The company made a similar claim in a 2016 press release; see Heroux-Devtek production contract for F-35 door uplock systems extended for two additional years, Héroux-Devtek (Airframer), May 25, 2016.
- 23 <u>Héroux-Devtek Reports First Quarter Results</u>, *Héroux-Devtek*, Aug. 6, 2024.
- 24 <u>F-35 Supplier Spotlight: Heroux-Devtek</u>, Lockheed Martin (YouTube), Jan. 29, 2014.



his section presents a detailed case study of Stelia Aerospace North America, based in Lunenburg, Nova Scotia. The components supplied by this company, namely, composite fuselage panels, are critical to the F-35s Israel has used to carpet-bomb Gaza since October 2023. As CEO &

Managing Director Bernard Mills admitted in a recent interview, "[a]II F35 [sic] aircraft **including those operated by the IDF in Gaza** have our parts on them."²⁶

What is Stelia?

Stelia describes itself as "an aerospace and defence com-

pany specializing in the design, development, and manufacturing of composites."²⁷ It is a subsidiary of Airbus Atlantic, part of the European aerospace and military conglomerate Airbus.

Stelia's primary site, which houses both manufacturing and administrative operations, is a 150,000 sq. ft. facility in Lunenburg, Nova Scotia. They also have a 32,000 sq.ft. facility in Mirabel, Quebec.

Created with funding from the federal and provincial governments, the company was established as Composites Atlantic Limited in 1987 to "supply

- 25 As Israeli jets devastate Gaza, air force photos show fighter aircraft armed with what look like unquided 'dumb' bombs, Business Insider, Oct. 16, 2023.
- 26 <u>Lunenburg Company Produced Parts Used By Israel in Gaza Genocide</u>, The Lunenburg Barnacle, Sep. 11, 2025 (emphasis added).
- 27 About Stelia, Stelia North America, nd.





launching canisters to [...] the air defense anti-tank system" (ADATS) program, according to parliamentary testimony given in 2010 by its then-CEO Maurice Guitton²⁸. By 2010, Stelia was the largest manufacturer of advanced composites in Canada, producing, "complex geometric parts using 24 different technologies." Stelia supplies arms manufacturers such as

Lockheed Martin, Northrop Grumman, L3Harris, and Boeing, in addition to producing parts for commercial aviation.³⁰

Since 2009, Stelia has been a supplier for Lockheed Martin's F-35 fighter/bomber, discussed in more detail in **Sections III-V** below. Stelia was one of "more than 60 Canadian companies, research laboratories and uni-

versities," that benefited from a \$168 million (CAD) Government of Canada investment in Lockheed's F-35 program from 2002 to 2010³¹. It was also one of the companies lauded by Lockheed in its 2021 promotional video on Canadian parts suppliers for the F-35 program.³²

Although Stelia has only a few hundred employees, it plays an outsized role in the Canadian arms industry. Its CEO and Managing Director, Bernard Mills,³⁴ is the chair of the Board of Directors of Canada's biggest arms industry lobby group, the Canadian Association of Defence and Security Industries (CADSI),³⁵ who host CANSEC, Canada's biggest arms fair, in Ottawa every year.³⁶

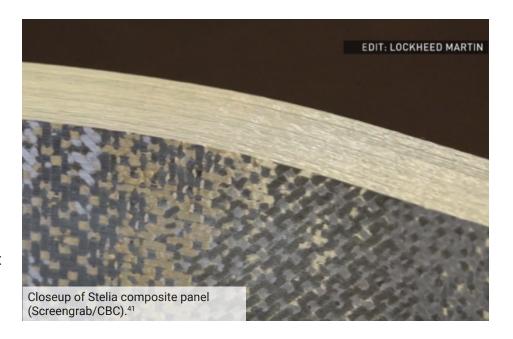
- 28 Evidence of Gilles Labbé (President and CEO of Héroux-Devtek) to the House of Commons Standing Committee on National Defence, Dec. 9, 2010.
- 29 <u>Evidence of Gilles Labbé</u> (President and CEO of Héroux-Devtek) to the House of Commons Standing Committee on National Defence, Dec. 9, 2010.
- 30 Stelia Aerospace North America, Facebook post, Jun. 9, 2023.
- 31 Government of Canada Delivering Long-Term Jobs and Economic Opportunities for Nova Scotia, Industry Canada, Sept. 15, 2010. (Stelia is referred to in this press release under its previous name, Composites Atlantic.)
- 32 <u>F-35 Lightning II: Made in Canada</u>, Lockheed Martin Content Storage (YouTube), Jan. 19, 2021.
- 33 <u>Handcrafting history continues in Lunenburg as aerospace company builds parts for F-35 jet</u>, *CBC News*, Aug. 6, 2022.
- 34 Bernard Mills (CEO and Managing Director of Stelia Aerospace North America), LinkedIn profile page.
- 35 <u>Board of Directors</u>, Canadian Association of Defence and Security Industries, nd.
- 36 <u>CANSEC</u>, Canadian Association of Defence and Security Industries, nd.

Stelia's website indicates that the company handles layup, machining, and non-destructive inspection (NDI) of F-35 components, including fuselage panels.³⁷

The significance of composites to the F-35

The F-35 was designed for its stealth capacities (the materials and design of the jet that make it difficult to observe with radar), referred to in arms industry jargon as "low observability" or LO. The F-35 is the first US-made military jet designed and manufactured for stealth from the outset.

Advanced composite materials, such as carbon-fiber reinforced polymers, are specifically engineered for their ability to absorb and dissipate radar energy, preventing it from being reflected back to the radar receiver.38 These carbon fibre composites made by Stelia for the F-35 are used to minimize the plane's "Radar Cross-Section" or detectability by radar.39 Carbon fibre composites make up about 35% of the weight of the F-35 airframe, 40 more than any other material (aluminum, steel, titanium, etc.).



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- 37 Our Products, Stelia North America, nd.
- 38 Hema Singh and Rakesh Mohan Jha, Active Radar Cross Section Reduction: Theory and Applications, Cambridge University Press, 2015.
- 39 Hema Singh and Rakesh Mohan Jha, Active Radar Cross Section Reduction: Theory and Applications, Cambridge University Press, 2015.
- 40 Lucjan Setlak, Rafał Kowalik, and Tomasz Lusiak, Practical Use of Composite Materials Used in Military Aircraft, Materials (Basel), Aug. 25, 2021
- 41 Handcrafting history continues in Lunenburg as aerospace company builds parts for F-35 jet, CBC News, Aug. 6, 2022.

Section III — The F-35: A key tool of Israel's devastation of Gaza

srael is using the F-35 at the highest rate in the history of the jet, mainly to bomb Gaza. Of all weapons used to commit genocide, the F-35 has the highest percentage of Canadian content. At the same time, it is the Israeli weapon most vulnerable to supply chain disruption, because it is the only major US-made weapon built with a "just-in-time" assembly line. Parts are meant to "arrive right before they're needed and little inventory is stockpiled", according to F-35 program director Lt. Gen. Michael Schmidt. "When you have that [just-in-time] mentality, a hiccup in the supply chain, whether it be a strike...or a quality issue, becomes your single point of failure," Schmidt said recently.42 "It's not good

to get to a certain point in the production line where this part needs to go into that part, and that part's not there."43

It is important, therefore, to identify which Canadian components the F-35 is most dependent on, and to track how Israel uses its F-35s to commit war crimes and genocide.

What is the F-35?

The F-35 is a multi-purpose fighter/bomber jet built by Lockheed Martin, primarily designed for ground attacks. Starting out at a price tag of \$200 billion USD (approximately \$276 billion CAD) in 2001, the F-35 jet program has ballooned in cost to \$2 trillion USD (approximately \$2.76 trillion CAD) for 2,470 jets,

making it "[o]fficially the most expensive weapon program in history."44 Approximately 1,000 additional jets are on order or anticipated to be sold to other nations, including 75 to Israel under Foreign Military Sales or Security Cooperation Agreements.45 Because of the extensive post-production modifications that had been made by the Israeli Air Force to the earlier F-16 jet, "the F-35 was designed from Day One [to consider] the individual requirements of customers who have requested significant modifications in the past," such as Israel.46 Since 2021, Israel has acknowledged using its F-35s to bomb apartment buildings in Gaza, killing dozens of children and civilians.47

Even though Lockheed Martin makes a wide variety of other weapons (including the Patriot, THAAD and HIMARS missile systems, Sikorsky Black hawk helicopters, and F-16 fighter jets), F-35 sales and maintenance are its biggest income source, accounting for 27% of its revenue.⁴⁸

At least 110 Canadian companies have built parts for the F-35. According to a study commissioned by Lockheed Martin, every F-35 jet contains \$2.3 million USD (approximately \$3.2 million CAD) worth of Canadian parts.⁴⁹ Parts and repair have ballooned into the most expensive aspect of the program:

The program's financial burden has reached the point

- 42 <u>Lockheed eyes new F-35 parts deal, but can it handle wartime demands?</u>, Defense News, May 2, 2023
- 43 Newest F-35s stalled by slow production of key parts, Defense News, Dec. 12, 2023
- 44 F-35: \$2T in 'generational wealth' the military had no right to spend, Responsible Statecraft, Aug. 21, 2024.
- 45 Global impact & politics of F-35 Sales: a comprehensive analysis, War Wings Daily, Dec. 13, 2023.
- 46 <u>Israel's F-35I Adir Fighter: Explained in 4 Words America Hates</u>, 19FortyFive, Feb. 24, 2025.
- 47 <u>US taxpayers are killing Gazans</u>, World Peace Foundation, May 21, 2021.
- 48 <u>Lockheed Makes 27% Revenues From F-35 Sales; How Else Is US Defense Behemoth Profiting From Global Conflicts?</u>, Eurasian Times, Jul. 25, 2022.
- 49 <u>Industrial and Regional Benefits: Economic Impact of Canada's Participation in the F-35 Joint Strike Fighter Program</u>, Lockheed Martin, Jun. 7, 2024.

where it's actually changing how the military operates. The cost to sustain the F-35 fleet through its planned service life has grown to \$1.58 trillion [USD; approximately 2.18 CAD] —a 44% increase from earlier estimates.⁵⁰

After Canadian and Australian alternative media published exposés on the key roles of Canadian, British and Australian parts in Israel's F-35s bombing Gaza, Lockheed purged almost all supplier information from its global web pages.⁵¹

Israel's F-35 fleet

Israel mainly uses three types of US-supplied jets to bomb Palestine and other neighbouring countries: the F-35, the F-15, and the F-16.

The entire Israeli fighter jet fleet totals 295 aircraft.⁵² Israel

received its first F-35 on June 22, 2016, and on December 6, 2017, its air force became the first, other than that of the US, to operate the F-35.53 Out of an initial order of 50 planes, Lockheed Martin had delivered 39 before October 2023, followed by three more by March 2024.54 Another three were delivered in April, three more are to be delivered by the end of 2025, and the last two are to be delivered in 2026.55

Every F-35 already received by Israel or currently contracted to be sent to Israel includes millions of dollars worth of Canadian parts, which are mainly exported to Lockheed Martin's facility in Fort Worth, Texas, to be integrated into the justin-time assembly line. Despite assurances from former Foreign Minister Mélanie Joly that "[w]e will not have any form of



arms or parts of arms be sent to Gaza, period,"⁵⁶ the Canadian government **has taken no steps** to restrict the flow of Canadian-made F-35 parts to the global supply pool for the production and maintenance of Israel's jets.

By contrast, the government of Japan expressed concerns as early as January 2013 that "F-35s that use Japanese parts may be exported to Israel," violating Japan's ban on parts going to nations "likely to be involved in international conflicts." This concern that Israel's inclusion in the F-35 program could drag any Japanese parts suppliers into complicity in illegal wars led Japan to decide not to supply parts to the global F-35 program (while making parts for the jet for its own use). 58

- 50 <u>America's Ultimate Weapons: The Trillion-Dollar Arsenal That Keeps the World's Superpower on Top, GovFacts, Jun. 20, 2025.</u>
- 51 Secrets of the weapons trade, Undue Influence, Apr. 12, 2024; How Canada helps build Israel's fighter jets, The Breach, Apr. 11, 2024.
- 52 Israeli Air Force (2025) Aircraft Inventory, World Directory of Modern Military Warships, Nov. 26, 2024.
- 53 Interview with Lockheed's Jack Crisler on F-35, December 2016, Barbara Opall-Rome (YouTube), Nov. 15, 2018.
- 54 Israel receives three more F-35I Adir Joint Strike Fighters, Aerospace Global News, Mar. 16, 2025.
- 55 <u>Israel receives three more F-35I Adir Joint Strike Fighters</u>, Aerospace Global News, Mar. 16, 2025.
- 56 Joly says Canada bars Canadian-made arms from reaching Gaza, Radio-Canada International, Sep. 11, 2024.
- 57 Japan worries about U.S. F-35 jet exports to Israel, United Press International, Jan. 31, 2013.
- 58 <u>How Many International Parts Are In The US F-35 Fighter Jet?</u>, Simple Flying, Aug. 28, 2024.
- 59 <u>F-35: Air Dominance Defined</u>, Lockheed Martin, Jan. 21, 2025.



Canada would have been aware of the Japanese government's risk assessment, and could have taken a similar path, but chose instead to expose itself and Canadian parts suppliers to the risk of complicity in war crimes committed by Israel. Canada is part of a six-nation "axis of genocide" arming Israel.⁶⁰

Lockheed Martin manufactures three versions of the F-35. The F-35A is the conventional version requiring a runway. This is the version Israel flies (with some of its own electronic warfare and computer additions) under the name "F-35i Adir." F-35B and C are carrier-based and vertical take-off versions, respectively, and are not flown by Israel.

One of the F-35's main selling

points for Israel is its stealth capacity, which allows Israel "to penetrate deep into enemy territory and attack heavily defended strategic targets," according to a study by the Institute for National Security Studies at Tel Aviv University. 63 The study openly asserts that the F-35 would give Israel the ability to make unprovoked attacks on other nations with no declaration of war: "Israel needs to be able to operate in enemy territory even in the absence of a wartime confrontation."64

For example, in response to Yemen's Ansar Allah (commonly referred to as the Houthi movement) attempting to defend Gaza, Israel used F-35s in July,^{65,66} and September 2024⁶⁷ to bomb port and oil

- 60 <u>Dr. Ghassan Abu-Sittah: 'Tomorrow is a Palestinian day'</u>, *Mondoweiss*, Apr. 12, 2024.
- 61 Israeli Air Force, X (formerly Twitter) post, Mar. 16, 2025.
- 62 <u>Israel's F-35I Adir: The Most Dangerous Fighter on Earth?</u>, *Epic Military News* (YouTube), Oct. 13, 2023.
- 63 <u>Israel 'needs F-35 to stay on top'</u>, *United Press International*, Jan. 31, 2011.
- 64 <u>Israel 'needs F-35 to stay on top'</u>, *United Press International*, Jan. 31, 2011.
- 65 <u>200 ירחא ףקת ל״הצ״ :וְרהטמ רתוי קוחר מ״ק 220 עגפנש למנב ייתוחה שומישה הז | "םירוגיש 220 ירחא ףקת ל״הצ״ :וְרהטמ רתוי קוחר מ״ק</u> [200 km further than Tehran: "IDF attacked after 220 launches" | This is the Houthi use of the port that has been damaged], *Ynet*, Jul. 20, 2024.
- Reports Claim Israeli Air Force F-35ls Involved In Israel's Retaliatory Air Strike In Yemen, The Aviationist, Jul. 20, 2024.
- 67 <u>Israeli F-35 Fighters: CNN Journo Shares 'First-Hand' Account Of IAF Jets Bombing Yemen's Hodeidah Port, Eurasian Times, Oct. 1, 2024.</u>

facilities in Hudaydah,68 killing dozens of civilians and injuring over one hundred, many with severe burns.⁶⁹ Human Rights Watch assessed the bombing as possibly a war crime, and warned that "[g]overnments that continue to provide arms to the Israeli government risk complicity in war crimes."70 The official Israeli Air Force account on X (formerly Twitter) described the crews who prepared the F-35s and other planes used to carry out the "amazing and emotional" bombing of Yemen as having worked "with a sparkle in their eyes."71

The F-35's stealth capacity is especially important in enabling Israel to attack Iran. When asked specifically about this subject in 2016, Defense News' Israel Bureau Chief Babara Opall-Rome said, "With these new F-35Is, they'll be able to sail right in." The F-35's radar-evasion provides Israel with a

weapon that cannot be deterred, a capacity possessed by only two weapons in Israel's arsenal: the F-35 and its (undeclared) nuclear weapons.

In 2016, Jack Crisler, as Lockheed Martin's VP for F-35 Business Development and Strategic Integration, bragged to Opall-Rome that the F-35, "give[s] the Israeli Air Force a capability in the region that is un-matched [his emphasis]. It is going to provide the foundation of QME [qualitative military edge] for years to come." With this "Qualitative Military Edge Israel can [...] prevail over any combination of adversaries in the region," Opall-Rome gloated.⁷⁴



"Let all our enemies know - the Israeli Air Force will step in and attack wherever it is needed. We are ready for any scenario, in defense and offense" - Major E., one of the pilots who participated in the strike.

Yesterday, in the first attack of the Air Force in Yemen, many people took part, including members of the F-35 Squadron.

Sergeant major Y., from the technical branch in the Squadron shares: "From the moment of the order, we armed and prepared the planes within a few hours. There was a different feeling in the air, everyone worked with a sparkle in their eyes. When our pilots returned, it was a very moving experience. There are so many people involved in this work for the sake of our country, and it's amazing and emotional."



- 68 Israeli jets strike Houthi targets in Yemen after Tel Aviv attack, Reuters, Jul. 20, 2024.
- 69 Dozens of Israeli planes strike port, power plants in Yemen after Houthi missile attacks, The Times of Israel, Sep. 29, 2024.
- 70 Yemen: Israeli Port Attack Possible War Crime, Human Rights Watch, Aug. 19, 2024.
- 71 Israeli Air Force, Facebook post, Jul. 21, 2024.
- 72 Israeli Air Force, Facebook post, Jul. 21, 2024.
- 73 The F-35 and Israel's Broader Military Priorities, Barbara Opall-Rome (YouTube), Dec. 13, 2016.
- 74 Interview with Lockheed's Jack Crisler on F-35, December 2016, Barbara Opall-Rome (YouTube), Nov. 15, 2018.

Section IV — "Beast Mode": the new maximum bombing capacity used exclusively by Israel's F-35s on Gaza

As early as October 10, 2023, The Israeli Air Force (IAF) distributed a photo of its F-35s being loaded with 2,000lb bombs.⁷⁵

At the same time, the IAF supplied military media with details of F-35-delivered bombs dropped on Gaza. To On October 12, 2023, the IAF acknowledged dropping 6,000 bombs on Gaza, publishing four photos of destroyed residential buildings on X (formerly Twitter) to

document the effects.78

On November 6, 2023, Times of Israel military correspondent Emanuel Fabian posted a photo of the IDF Chief of Staff Lt. Gen. Herzi Halevi standing in front of an F-35, and quoted him as saying that he had seen an F-35, "in the Gaza Strip" dropping "very heavy munitions."80 The F-35 behind the officer was photographed with a 2,000-lb GBU-31 bomb under its wing.81 The IAF also distributed a photo on social media of F-35s being loaded with 2,000-lb bombs for use against Gaza.82 As early as December 2023, US military publications detailed

the extent to which Israel was using its F-35s against Gaza, an "airspace that is almost totally undefended."

During the period since the International Court of Justice issued its provisional order of January 2024 finding that it was "plausible" that Israel was committing genocide, Lockheed Martin has pioneered a brand new maximum bombing capacity uniquely for Israel's F-35s called "Beast Mode", quadrupling the amount of bombs it can carry. Lockheed had theorized "Beast Mode" as early as 2017, but only brought it to fruition during the current Gaza bomb-



ing, working with Israel to test the new F-35 configuration on Palestinians. Israel is the only

- 75 Israeli Air Force, Facebook post, Oct. 10, 2023.
- 76 Configuration And Payload Of The Aircraft Employed By Israel In The Fight Against Hamas, The Aviationist, Oct. 12, 2023.
- 77 Meet Israel's F-35I Adir Stealth Fighter (Hamas and Iran Should Freak Out), 19FortyFive, Nov. 2, 2023.
- 78 Israeli Air Force, X (formerly Twitter) post, Oct. 12, 2023.
- 79 Israeli Air Force, X (formerly Twitter) post, Oct. 12, 2023.
- 80 IDF chief says Israel 'knows how to reach anywhere in the Middle East', Times of Israel, Nov. 6, 2023.
- 81 @blocksixtynine (self-described "Lockheed aligned" account), X (formerly Twitter) post, Nov. 7, 2023.
- 82 Israeli Air Force, <u>Facebook post, Oct. 10, 2023</u>.
- 33 How Useful Are Israel's F-35s For Gaza and Lebanon Operations? Surge in Parts From U.S. Facilitates Intensified Strikes, Military Watch Magazine, Dec. 15, 2023.

air force outside of the USAF to have a dedicated "Test" version of the F-35, specifically to try out new munitions capacities for the jet.⁸⁴ Israel is still the only air force using "Beast Mode."

On March 16, 2025, the Israeli Air Force confirmed via X (formerly Twitter) that Lockheed had implemented this new maximum bombing capacity for Israel's F-35s: "Flight Test Center, in collaboration with [Lockheed Martin] and the Pentagon's F-35 program, developed a capability for external JDAM carriage. Israel's "Adir" is the only F-35 to conduct strikes with this design."

Because "Beast Mode" makes the F-35 more visible to radar, this maximum capacity can only be used against populations with no radar and no air defences, i.e., defenceless populations. In a commentary⁸⁷ to the Eurasian Times, and on his personal blog,⁸⁸ the former Vice Chief of India's Air Force indicated that Israel would use the F-35 in this new "Beast Mode" against Gaza "to maximize firepower."



Post depicting Israeli F-35 carrying externally-mounted GBU-31 2,000-lb bomb during Nov. 6, 2023 press conference on use of F-35 in Gaza (@blocksixtynine/X).⁸⁶





F-35 "stealth mode" vs. "beast mode" (Lockheed Martin).89

- 84 <u>Israel is getting stronger, F-35I Israeli-made technology and weapons,</u> Defence News (YouTube), Aug. 11, 2020.
- 85 Israeli Air Force, X (formerly Twitter) post, Mar. 16, 2025.
- 86 @blocksixtynine, X (formerly Twitter) post, Nov. 7, 2023
- 87 After 1st Combat Use Of F-35, Israel Achieves Another First By Flying Adir Stealth Fighters In "Beast Mode", Eurasian Times, Mar. 18, 2025.
- 88 624: F-35 Stealth Vs Beast Mode, Air Marshal's Perspective, Mar. 18, 2025.
- 89 <u>F-35 Weaponry</u>, Lockheed Martin, archived Jan. 7, 2019.

Section V — Israel's aerial bombardment strategy: Playing billiards with a bowling ball

Israel's use of the F-35 in Gaza is public knowledge

n 2014, Israel declared a change in military strategy,91 deciding to use fixed-wing aircraft like F-15s, F-16s and F-35s instead of artillery to perform the majority of its bombardment of Gaza. Israeli Air Force Brig. Gen. Amikam Norkin called this "playing billiards with a bowling ball." From 2014 onward, it would have been clear to objective observers that any provider of parts for Israeli fixed wing military aircraft (including the F-35) would likely be aiding Israel to conduct indiscriminate destruction of Gaza amounting to war crimes.

"How many innocent children were killed by the deadly killing machine you piloted?"

— Israeli Air Force pilots (2025)⁹⁴

During the furious first weeks of intense Israeli aerial bombing of Gaza following October 7, 2023, US Congressional hearings on the F-35 were told that the US had moved "at breakneck speed to support our closest partner and ally in the Middle East, Israel [...] by accelerating F-35 weapons capabilities and increasing spare part supply rates."92

Four months later, the US head of logistics for the F-35, Maj. Gen. Donald Carpenter gave a detailed breakdown⁹³ of Israel's unprecedented heavy rotation of F-35s in the jointly-coordinated US-Israeli bombing campaign against Gaza. The US, with the help of F-35 parts suppliers in Canada, enabled Israel to

increase its use of the F-35 by 565%, particularly when the "Israelis are generating 2-4 daily sorties per aircraft for short-duration flights."94 ("Short-duration" refers here to the quick-turnaround Israeli bombing runs from Nevatim Air base to Gaza.95) The US "surged" the "global F-35 spares pool" (including parts from Canadian suppliers⁹⁶) allowing Israel to fly F-35s "at a rate of 35-39 jets a day," according to Carpenter,97 making this the most heavily used fleet of F-35s in the world.

It appears that Lockheed and the US Defence Department Joint Program Office openly extol⁹⁸ the performance of Israel's F-35s in Gaza as a way to counter negative government

- 90 <u>"ונעדי אל ,תודוקפ ונאלימ קר" רמול ולכות אל ,ריוואה ליח יסייט ,ונירבח "(</u>Our friends, Air Force pilots, you can't say, "We just followed orders, we didn't know"], *Haaretz*, Jun. 5, 2025.
- 91 <u>Israel Air Chief: Heavy Weapons for Small Wars</u>, Defence News, May 30, 2015.
- P2 Rep. Rob Wittman, <u>Tactical Air and Land Forces Hearing: F-35 Acquisition Program Update</u>, U.S. House Armed Services Committee (YouTube), Dec. 12, 2023.
- 93 <u>U.S. F-35 Sustainment Lead Details Israel Fleet Ops Since October</u>, Aviation Week Network, Apr. 10, 2024.
- 94 <u>U.S. F-35 Sustainment Lead Details Israel Fleet Ops Since October</u>, Aviation Week Network, Apr. 10, 2024.
- 95 F-35 Lightning II Joint Program Office, X (formerly Twitter) post, Feb. 6, 2023.
- 96 <u>How Canada helps build Israel's fighter jets</u>, *The Breach*, Apr. 11, 2024.
- 97 <u>U.S. F-35 Sustainment Lead Details Israel Fleet Ops Since October</u>, Aviation Week Network, Apr. 10, 2024.
- 98 <u>U.S. F-35 Sustainment Lead Details Israel Fleet Ops Since October</u>, Aviation Week Network, Apr. 10, 2024.

audits⁹⁹ of Lockheed's most profitable weapons system. The US and Israel are not just using this jet to commit genocide, they also appear to be using genocide to sell this jet.

The U.S. House Armed Services Committee devoted almost its entire December 2023 session¹⁰⁰ to studying and praising Israel's post-October 7th use of F-35 jets to bomb Gaza. In a January 2024 report, describing its 29,000 airstrikes on Gaza, the Israeli Air Force gave a detailed account of its use of F-35s in Gaza.¹⁰¹

In a March 16, 2025 X post¹⁰² the Israeli Air Force announced that its F-35s had logged 15,000 flight hours since October 2023 and "thousands" of bombing runs over Gaza and other areas. In the same thread, the Israeli military thanked Lockheed for helping it to increase the bombing payload of the F-35 to a new "Beast Mode" level not used by any other airforce.

These public statements by the US and Israeli military officials responsible for the F-35 make it clear that the jet is being used very prominently against the Palestinian civilian population of Gaza. Neither the companies supplying parts to the F-35 nor the governments allowing these exports can claim not to have known that they were contributing to the destruction of Gaza.

All Canadian suppliers of parts to Israel's F-35 were or ought to have been aware by December 2023 at the latest that these parts were being used to destroy Gaza.

Use of the F-35 in a specific Israeli war crime (July 2024 air strikes on al-Mawasi tent camp)

As previously documented by SftP Canada,¹⁰³ the Israeli Air Force acknowledged that it



Fawzia Sheikh Yousef, who went through the Nakba, says the massacre she witnessed at Mawasi was worse than what she saw in 1948 (Hasan Suleih, Mondoweiss). ¹⁰⁵

used F-35s in a particularly horrific war crime in Gaza: dropping at least three 2,000-lb bombs on tents in the al-Mawasi designated humanitarian zone on July 13, 2024. Israel launched the attack with no prior warning, destroying a water source, food distribution site, and market, setting fire to dozens of civilians in tents, and burying alive many others. The bombing, carried out using F-35s, killed 141 Palestinians and wounded 300 more.

Samah al-Farra, a survivor of the massacre in al-Mawasi, described "a shower of missiles falling four times in a row," in quantities that would be enough to destroy fortified buildings. "But," she added, "What about when they fall on tents whose owners are protected only by a piece of cloth?"¹⁰⁴

After the al-Mawasi attack, then-Israeli Defence Minister Yoav Gallant went to the Ne-

- 99 F-35 Joint Strike Fighter: Actions Needed to Address Late Deliveries and Improve Future Development, U.S. Government Accountability Office, Sep. 3, 2023.
- 100 Tactical Air and Land Forces Hearing: F-35 Acquisition Program Update, U.S. House Armed Services Committee (YouTube), Dec. 12, 2023.
- 101 Israeli Air Force struck 31,000 targets in four months of war, Breaking Defense, Feb. 20, 2024.
- 102 Israeli Air Force, X (formerly Twitter) post, Mar. 16, 2025.
- 103 It Takes a Village to Kill a Child, Science for the People Canada, Jan. 15, 2025.
- 104 Testimonies from the Mawasi massacre: 90 people buried in the sand, Mondoweiss, Jul. 14, 2024.
- 105 Testimonies from the Mawasi massacre: 90 people buried in the sand, Mondoweiss, Jul. 14, 2024.

הבוקר בבסיס חיל האוויר בנבטים יחד עם טייסי הקרב והצוותים הטכניים שהשתתפו בתקיפת הבכירים במרחב ח׳אן יונס.

אנו ממשיכים לשחוק את חמאס ולפרק את יכולותיו. בכל המקומות ובכל הדרגים -מהמחבל הבכיר ביותר ועד לזוטר, נמשיך לחסל את כל מי שקם להורגנו ב-7.10.

Translated from Hebrew by Google

This morning at the Air Force base in Nevatim, together with the fighter pilots and technical teams who participated in the attack on the senior officials in the Khan Yunis area.

We continue to wear down Hamas and dismantle its capabilities. In all places and at all levels – from the most senior terrorist to the most junior, we will continue to eliminate everyone who rose up to kill us on October 7th.

Rate this translation: 🖒 🖓



11:13 AM · Jul 14, 2024 · 19.3K Views

Israeli Defence Minister Yoav Gallant, seated in front of Israeli F-35 at Nevatim Air Base, thanks F-35 pilots and technicians for dropping 2,000-lb bombs on the al-Mawasi tent camp the previous day (Yoav Gallant/X).¹⁰⁷

vatim air base in southern Israel, home to its F-35 squadron, "to thank the pilots for their participation in the attack." ¹⁰⁶

This is just one war crime among what is likely thousands that have been perpetrated using the F-35, presented here only because it is one of the best-documented.

Effects on Children & Civilians: Military analysts on the Israeli bombing campaign

The Israeli Air Force bombing tactics in the region, and against Palestinians in Gaza in particular, have shocked military analysts and experienced military veterans with knowledge of bombing tactics, in both the US and Israel.

In October 2024, the US Naval Institute published an analy-

sis¹⁰⁸ of Israeli use of US-made 2,000-lb bombs dropped onto residential areas. On September 27, 2024, Israel used eight F-15s to drop between fifty-six and eighty 2,000-lb bombs on a Beirut suburb to assassinate Hezbollah leader Hassan Nasrallah, an unprecedented act that prompted the US Navy analyst to comment:

Two factors in the Israeli strike stand out. The first is quantity. According to a U.S. Air Force Central Command report¹⁰⁹ on the 2003 invasion of Iraq, U.S. air forces expended a total of 24 GBU-24 [2,000-lb] and GBU-28 (4,000-lb) bunker busters in the entire conflict against the Iraqi military. In a single bombing raid against Lebanon, Israel dropped up to three times as many weapons in one night. [...]

This leads to the second

- Danskudstyrede kampfly deltog i angreb i Gaza med store civile tab [Danish-equipped fighter jets participated in attacks in Gaza with heavy civilian casualties], Information, Sep. 1, 2024 (original in Danish).
- 107 Yoav Gallant, X (formerly Twitter) post, Jul. 14, 2024.
- 108 <u>A Closer Look at Israel's Use of 80 Bunker-Buster JDAMs in Beirut</u>, *US Naval Institute*, Oct. 2024, Vol. 150/10/1,460.
- 109 Operation IRAQI FREEDOM By The Numbers, US Air Forces Central Command, Apr. 30, 2003.

stand-out factor in the Israeli strike. The IAF (and the Israeli Defense Forces in general) seems to have taken a notably different approach to collateral damage than U.S. forces over the past few decades.

During [American military campaigns in Afghanistan and Iraq], U.S. decisions about whether to risk civilian casualties around military targets were typically elevated to the highest levels possible before approval. [...]

In a counterinsurgency campaign, the goal is to avoid turning the civilian population against you, so preventing civilian casualties and damage to infrastructure becomes vital. [...]

Israel's military, on the other hand, seems to have a higher threshold for collateral damage in the current operations against Hamas and Hezbollah—meaning they strike even when chances are high-

er for civilian casualties. 110

A "higher threshold for collateral damage" means Israel is willing to disproportionately kill civilians in its bombing campaigns.

On June 13, 2024, two US military veterans, Greg Stoker and J.P. Alfred, described in detail the effect of Israel's dropping large 2,000-lb bombs onto a tightly-packed population in Gaza.¹¹¹ Alfred spoke with expert knowledge, as he used to coordinate air-to-ground operations as a Combat Controller with the United States Air Force's 125th Special Forces Squadron¹¹²:

In this case your accuracy should be precise when you're dealing with such a densely populated area.

For those people that have been watching the actual genocide taking place on Instagram [...] specifically [with respect] to the beheaded child that you saw where the father was holding him up — I don't think that people really

"when the pressure is so much, your head explodes — as you saw that child's head explode"

understand why that child lost his head. [...]

The over-pressure from the bomb dropping — so that people understand this — the brutality — when a bomb drops in such close proximity there's something called over-pressure: the amount of air and the amount of pressure that escapes from that area of that of that strike is so massive that that small frame of the child is rattled so much that their rib cage collapses.

The alveoli inside of their lungs burst and there's no place for the pressure to escape, so it has to go to the path of least resistance and that's your eyes, your ears, your nose, and your mouth. And when the pressure is so much, your head explodes — as you saw that child's head explode.

Again, I highlight this because I think it's important to understand that that's not accidental.

That strike took place in the middle of the night as you showed in that [surveillance] video in the beginning, where you can actually see each person and count [them]. Israel had a video exactly like that, that showed them how many people were in those tents, how many people were in the area that they were about to strike, and they still decided to drop a bomb.

And the question becomes: you're no longer in the de-

- 110 A Closer Look at Israel's Use of 80 Bunker-Buster JDAMs in Beirut, US Naval Institute, Oct. 2024, Vol. 150/10/1,460 (emphasis added).
- 111 Complicit in All War Crimes US Surveillance and Intelligence Above Gaza, Colonial Outcasts (YouTube), Jun. 13, 2024.
- Military analysts consider the 125th Special Forces Squadron one of the most elite units in the US Air Force. In the interview, J.P. Alfred admits that he is a Republican and voted for US president Donald Trump.

fense, you're in the offense. Because if there are not rockets and missiles flying from that area, you don't strike. You don't strike. You just don't strike.

And if there are rockets and missiles flying from that area, proportionality must

"under no capacity can you sit there and justify this [...] because even in war there are rules." exist, and you have to decide: "Is this threat substantial to my current forces on the ground?"

And the answer to that is "No."

"Is the collateral damage around this strike worth the actual ramifications that we see come out now?"

The answer to that is "No."

So you do not strike.

In any other case, Greg, you and I, the commander on the ground, the sensor operator, the pilot, the JAG [Judge Advocate General; a US military lawyer] who approved everything, would all be in Leavenworth [US military prison].

We would all be strung up on charges, in our best dress, standing tall, because there is no legal capacity that we can honestly say that that's a strike that should have been done. [...]

You literally have the videos where people are literally

"a family brought in 10 people and three of them were young girls between the ages of 10 and 14, all of them dead on arrival."

recording these rounds coming in and [...] I know how a 1,000-lb or 2,000-lb bomb drops [...] and I'm listening to this and I'm like, "Jesus Christ, who's going to jail for this?"

Because under no capacity can you sit there and justify

this [...] because even in war there are rules.¹¹³

J.P. Alfred's description explains why so many children have been killed by Israeli airstrikes. Large bombs dropped by F-35s (and other aircraft) have a much more devastating effect on children than they do on adults.

Dr. Thaer Ahmad, a Palestinian-American doctor from Chicago, described the effect of the F-35 "deadly killing machine" on Gaza's civilians, in Feb 2024:

You can hear¹¹⁴ the F-35 overhead, and it felt literally like they were about to land on top of the hospital. And then you would hear a whistling noise as soon as you heard the F 35, and you knew that a missile was flying down and getting ready to hit. And honestly [...] it's just kind of this sort of reflex. But I was closing my eyes every time you would hear that missile blowing [up]. Just not sure if it was going to hit the hospital or not. [...]

¹¹³ Complicit in All War Crimes - US Surveillance and Intelligence Above Gaza, Colonial Outcasts (YouTube), Jun. 13, 2024.

¹¹⁴ The F-35 is distinctly louder than other jets, leading US communities to protest against stationing of F-35 squadrons near their towns: Noise Level Comparisons: F-35 and other Aircraft, Safe Skies Clean Water Wisconsin, Apr. 15, 2020.

And about 15 to 20 minutes later, you get an influx of these trauma patients, you'd get 15, 20 people and they would be rushed in [...] many of them were dead on arrival. Many of them were clearly, they had succumbed to their injuries right away, from the air strike, from the collapse of a house. And some of them were really critically injured. And so you gotta get down, you are literally treating patients on the floor because there are no more hospital carts. [...]

I remember one of the nights that a house was hit and a family brought in 10 people and three of them were young girls between the ages of 10 and 14, all of them dead on arrival.

And I remember one of the fathers asking me, please keep working, please try to save her. And it was very clear that there was nothing that I could do. And you're sitting there and you're just watching a family, a mother and a father mourn the loss of their daughter, but also you just realize their house was bombed. So what are they going to do? I mean, they wrap up their daughter, they go and bury her, and then they look for a place that they can shelter. I mean, there's not even a second to think about what's happened.¹¹⁵

This high death toll of Palestinian civilians, particularly children¹¹⁶, has even prompted some Israeli pilots to protest the use of the "deadly killing machines [they] pilot."

At 2:00 am on March 18, 2025, during Ramadan, Israeli jets launched a surprise¹¹⁸ mass-bombing of Gaza, unilaterally ending a ceasefire, and killing over 400 Palestinians, including 130 children, in what UNICEF called **"the largest**"



Injured Palestinians wait for treatment at the hospital following Israeli army airstrikes in Khan Younis, southern Gaza Strip, Tuesday, Mar. 18, 2025. (AP Photo/Mohammad Jahjouh).¹¹⁷

single-day child death toll in the last year."¹¹⁹ Defence for Children International — Palestine assessed the death toll as much higher, with a representative commenting that "183 dead children, comprising almost half of yesterday's death toll, tells me that this is a war on children."¹²⁰

Genocide scholar William

Schabas has argued that Israel's attacks on Palestinian children in Gaza make it more likely to be found guilty of genocide due to positions taken by Canada and other nations in the ICJ case against Myanmar: "[...] in The Gambia's case against Myanmar at the ICJ, several Western states—Canada, Ger-

- 115 Being a Trauma Doctor in Gaza with Dr. Thaer Ahmad, The Majority Report, Feb. 14, 2024.
- 116 Gaza children being killed or mutilated in 'very extreme' numbers, Australian doctor says, The Guardian, Dec. 21, 2023.
- 117 Netanyahu says Israeli strikes across Gaza that killed hundreds are 'only the beginning', Associated Press, Mar. 18, 2025.
- 118 Israel's surprise bombardment plunged Palestinians back into 'hell', Associated Press, Mar. 18, 2025.
- 119 Israel's air strikes cause 'largest single-day' death toll for children in past year: UNICEF chief, Middle East Monitor, Mar. 18, 2025 (emphasis added).
- 120 <u>18 March 2025: The day 183 children in Gaza were massacred by Israel</u>, *Middle East Eye*, Mar. 19, 2025 (emphasis added).

many, France, the UK, Denmark, and the Netherlands—filed a joint intervention in late 2023, before South Africa filed its case against Israel. In that intervention, they called for a more liberal approach to genocide, suggesting that genocidal intent could be inferred from factors like forced displacement within a territory—something we see regularly in Gaza—or **the**

victimization of children, which we also see very dramatically in Gaza.¹²¹

On June 5, 2025, retired Israeli pilots Brigadier General Asaf Agmon and Colonel Uri Arad published an open letter in Haaretz¹²² commenting on the role of their Air Force colleagues in the "horrifying" attacks of March 18 (described above), titled, "Our friends, Air Force

pilots, you can't say, 'We just followed orders, we didn't know." In the letter, the two retired pilots detailed the illegality and the role of the Israeli Air Force and aircraft¹²³:

The Air Force has become a tool for those, in government and even in the military, who insist there are no innocent people in Gaza. [...] Recently, a member of the Knesset even boasted that one of the government's achievements is that today it is possible to kill a hundred people a day in Gaza and no one is moved by it anymore.

[...]

Things reached a peak on the night of 18 March, with the resumption of the war after the Israeli government deliberately chose to violate the agreement to return the hostages. In a deadly air strike, [...] new records were set. The weapons dropped by the air force pilots on the target killed some 300 people,

including many children. [...]

Since then, the air force has continued to attack Gaza relentlessly. [...] Entire buildings where children, women and civilians are bombed [...].

[Addressing their fellow pilots] You will have to stand before your children and grandchildren and explain how unimaginable destruction was wrought in Gaza, how so many innocent children were killed by the deadly killing machine that you flew.

To date, no Canadian newspaper has published anything remotely similar to this *Haaretz* letter, asking workers and executives at Canadian F-35 suppliers like Stelia, Gastops, Asco, Magellan, Ben Machine and Héroux-Devtek "how many innocent children were killed by the deadly killing machine you built?"



al-Mawasi "humanitarian zone" after F-35 bombing, Jul. 13, 2024 (Mohammed Salem/Reuters). 124

- 121 Professor Schabas: US, Germany, and Others Could Be Held Liable as Accomplices to Genocide in Gaza, European Center for Populism Studies (ECPS), Aug. 30, 2025.
- 122 <u>ונעדי אל ,תודוקפ ונאלימ קר" רמול ולכות אל ,ריוואה ליח יסייט ,ונירבח" (</u>Our friends, Air Force pilots, you can't say, "We just followed orders, we didn't know"], *Haaretz*, Jun. 5, 2025.
- 123 A portion of the letter was translated and published in a column by Thomas Friedman: This Israeli Government Is a Danger to Jews Everywhere, New York Times, Jun. 11, 2025.
- 124 At least 90 Palestinians reported killed in Israeli strike targeting Hamas military chief, CNN, Jul. 14, 2024.

Conclusion — How not to be complicit in Genocide

ormer US State Department official Josh Paul, who spent 11 years overseeing US arms transfers to other states, 125 was asked by an Australian journalist what it would mean if Australia supplied F-35 parts to Israel. He answered, "It is directly the facilitation of war crimes. There's no question about it to my mind."126

The same applies to Canada. Supplying vital parts for Israel's F-35s is "absolutely central" to enabling war crimes.¹²⁷

The Canadian government has responsibilities under international law that can only be fulfilled by imposing a full arms embargo on weapons and parts for end-use by Israel. This must

include cutting off the supply of Canadian-made F-35 parts to Israel via Lockheed Martin's global supply chain.¹²⁸

The time for government excuses has ended. The evidence is clear: Canada remains an active participant in genocide, and only immediate and comprehensive action can stop this complicity.

In light of the Canadian government's failure to fulfill its own commitments under international law, it falls to the public to implement a "People's Arms Embargo" to the best of its ability.

Genocide requires many people and many parts, but each of these presents an opportunity to throw a wrench in the gears of the war machine.

Canada's arms exports violate international law

Canada is a signatory to both the Convention on the Prevention and Punishment of the Crime of Genocide¹²⁹ (commonly known as the Genocide Convention) and the Arms Trade Treaty¹³⁰ (ATT). As was affirmed in a recent UN report, Canada and other states are required to "[c]ease the transfer of arms and other equipment or items [...] to the State of Israel or third States where there is reason to suspect their use in military

operations that have involved or could involve the commission of genocide."131

There is not only "reason to suspect" that parts manufactured in Canada could be used in Israel's genocide, there is clear evidence that those parts already have been and still are being used for war crimes and genocide.

Genocide scholar William
Schabas has also argued that
South Africa's case against
Israel at the ICJ is "arguably the
strongest case of genocide ever
brought before the Court" and
that third-party states — including Canada — could be found
guilty of violating Article III of
the Genocide Convention: "To
the extent that they are provid-

- 125 State Dept. Official Josh Paul Resigns Over Arms to Israel, New York Times, Oct. 19, 2023
- 126 <u>Interview with Josh Paul: Australia's part in Israel's weapons supply chain, Australia Broadcasting Company Radio, August 8 2025. See also arms control expert Michelle Fahy's reporting: Australia's F-35 exports a "facilitation of war crimes": US expert, Undue Influence, Aug. 17, 2025.</u>
- 127 Australia's F-35 exports a "facilitation of war crimes": US expert, Undue Influence, Aug. 17, 2025.
- As Stelia's CEO acknowledged, Canadian parts for Israel's F-35s may be supplied via the USA, Denmark, or Germany, and until recently were being sent directly to Israel as well: Lunenburg Company Produced Parts Used By Israel in Gaza Genocide, The Lunenburg Barnacle, Sep. 11, 2025.
- 129 Convention on the Prevention and Punishment of the Crime of Genocide
- 130 <u>Arms Trade Treaty</u>
- 131 Legal analysis of the conduct of Israel in Gaza pursuant to the Convention on the Prevention and Punishment of the Crime of Genocide, United Nations Human Rights.

ing material assistance of a significant nature, they can be held responsible as accomplices to genocide."¹³²

By allowing Canadian companies to provide weapons components to be used by Israel, the Canadian government is in blatant contravention of its obligations under the Genocide Convention and the ATT.

Russia vs. Israel: Canada's double standard

It is instructive to contrast the evasiveness of Canada's position on arms exports to Israel with its swift and decisive action in relation to Russia. Following the Russian invasion of Ukraine in February 2022, Canada introduced regulations prohibiting "any person in Canada and any Canadian outside Canada from exporting, selling, supplying or shipping any good, wher-

ever situated, or to provide any technology, to Russia or to any person in Russia,"133 if that good is included in any category of the extensive Restricted Goods and Technologies List. 134 This list notably includes "[p]arts and components, specially designed for [aircraft,] not elsewhere specified." The F-35 components manufactured by Canadian companies covered in the current report would likely fall under this category, and exporting them to Russia would therefore be prohibited. The Restricted Goods and Technologies List, prohibiting the export to Russia of hundreds of items, was first published within a month of the invasion of Ukraine.

The UN Human Rights Monitoring Mission in Ukraine "has documented the deaths of at least 13,883 civilians, including 726 children" since February 2022. 135 By comparison, the Gaza Government Media Office stated that, as of September

5, 2025, at least 64,300 people had been killed, including 19,424 children, since October 2023, counting only those whose bodies were registered in hospital¹³⁶ — undoubtedly an extreme undercount, given the general devastation and in particular the destruction of health services that would otherwise register

"Leaked internal Israeli military documents (...) show that, by their own count, at least 83% of the people they have killed in Gaza were civilians."

deaths. Leaked internal Israeli military documents from May 2025 show that, by their own count, at least 83% of the people they have killed in Gaza were civilians. 137 Assuming the proportion has held stable since then, this would amount to at least 53.300 civilians killed since October 2023 — over 3.8 times as many total civilians and 26.8 times as many children killed as in Ukraine since February 2022, in a shorter timespan and from among a much smaller total population.

For Canada to block export of aircraft parts to Russia because of their potential use in Ukraine while allowing export of aircraft parts to Israel despite their actual, documented use in Gaza is a clear racist double-standard. There is **no excuse** for Canada not to have restrictions on exports of military and dual-use goods to Israel that are at least as strict as those on exports to Russia.

- 132 <u>Professor Schabas: US, Germany, and Others Could Be Held Liable as Accomplices to Genocide in Gaza</u>, European Center for Populism Studies (ECPS), Aug. 30, 2025.
- 133 Canadian Sanctions Related to Russia, Global Affairs Canada, last updated Sep. 10, 2025.
- 134 Restricted goods and technologies list, Global Affairs Canada, last updated May 6, 2025.
- Number of civilians killed and injured in Ukraine reaches three-year monthly high in July 2025, UN human rights monitors say, UN Human Rights Monitoring Mission in Ukraine, Aug. 13, 2025.
- 136 <u>961 بيان صحفي رقم 961</u> [Press Release No. (961)], Government Media Office (Telegram), Sep. 5, 2025.
- 137 Israeli army database suggests at least 83% of Gaza dead were civilians, +972 Magazine, Aug. 21, 2025.

What can workers do?

Workers at the companies covered in this report have a unique opportunity to stop the flow of military goods to Israel. As Lt. Gen. Michael Schmidt, the US military's executive officer for the F-35 program, said in 2023, the just-in-time logistics of the F-35 means that "a hiccup in the supply chain, whether it be a **strike** ... or a quality issue, becomes your single point of failure." ¹³⁸

By acting collectively, workers can use their essential role in the production of F-35 parts to force their employers to stop arming Israel. Withholding labour is one of the working class's most powerful weapons.

This degree of solidarity and resoluteness will not be achieved overnight; it will require persuading and supporting workers in committing to taking action, and collective organizing to protect them against retaliation from their employers.

The employees of one F-35 supplier do not have to act alone, but can draw on support from larger unions and labour federations. Labour for Palestine's "hot cargo" campaign calls on unions and labour federations to "[d]eclare all Israeli products, services and relationships with Israel as HOT CARGO, not to be touched by workers of conscience."139 Unifor, a union that represents many workers in the arms industry, recently passed a resolution at its Constitutional Convention calling for an arms embargo on Israel.¹⁴⁰

If workers at a particular workplace are not prepared to withhold their labour to block the export of military goods to Israel, they can still take collective action to pressure their employer. This could include demanding that an anti-genocide clause be incorporated into collective agreements as they come up for negotiation, or passing resolutions calling on their employer to refuse contracts to supply genocide. In workplaces where there is not yet a critical mass of anti-genocide workers, individual workers can still play an important role, for instance by putting pamphlets, posters, or stickers in strategic locations around the workplace, or by gathering information about their employer's operations and passing it on to organizations campaigning against arms exports to Israel.

Workers in associated sectors, such as those who transport parts from the facilities where they are manufactured to airports or ports for export into the F-35 global supply pool, have similar opportunities to collectively refuse to transport parts, to pressure their employers, or to collect information about the supply chain and pass it on to relevant organizations.

- 138 Lockheed eyes new F-35 parts deal, but can it handle wartime demands?, Defense News, May 2, 2023 (emphasis added).
- 139 <u>Time for Canadian Unions to Declare Hot Cargo on Israel!</u>, Labour for Palestine, Sep. 1, 2025.
- 140 <u>Unifor passes resolution in support of Palestinian workers and their call for an arms embargo on Israel, Socialist Project, Sep. 5, 2025.</u>

What can other Canadians do?

The statements of "concern" about the "humanitarian situation" in Gaza that Canadian politicians issue from time to time portray Canada as a helpless bystander. Establishment media outlets work faithfully to instill a similar feeling of impotence in the public. But since important suppliers of F-35 parts - in some cases the only manufacturer in the world of a specific part — are located in Canada, pressure from civil society to stop the supply of parts can have a significant impact on the Israeli war machine.

Those who live close to the facilities making parts for genocide jets can go talk the workers at those facilities, some of whom may be their neighbours. Many of them are likely already concerned about the parts they work on, and would need only a judicious combin-

...........

ation of encouragement and pressure to take action within their workplaces, as outlined in the previous section. Given the risks involved, however, bringing about this shift in those workers' behaviour may require sustained, patient engagement over weeks and months. This can take the form of regular weekly gatherings outside the facility, making it impossible for workers and management to ignore where the parts they make are going and what they are being used for. 141

Members of the public can also push any collective body they are involved in — labour unions, student associations, faith groups, neighbourhood associations, etc. — to pass and implement resolutions in support of the boycott, divestment, and sanctions (BDS) campaign, 142 as well as resolutions against local arms manufacturers that are supplying Israel's genocidal military. These resolutions should



Activists blockade a Héroux-Devtek facility in Longueuil, Apr. 2, 2024 (Action contre les armes via *Pivot*). 141

include specific calls to action on the part of the collective body that passes them, such as selling any of its own holdings in companies that are complicit in genocide, donating money to organizations that are already campaigning against local arms manufacturers, or participating as a group in protests.

^{141 &}lt;u>Héroux-Devtek bloqué pour sa contribution aux avions F-35 utilisés à Gaza, Pivot,</u> Apr. 2, 2024.

¹⁴² What is BDS?, BDS National Committee, Nov. 2024

Canadian politicians have made clear that they will not implement a real arms embargo on Israel based on a principled opposition to genocide, or even based on a desire to preserve the fiction of a "rules-based international order." However, they could still be made to do so out of political expediency; that is, if pressure from the public were to lead them to conclude that the consequences of continuing arms exports to Israel

would be greater than those of putting an end to them. Direct pressure on politicians, such as picketing, or postering outside of their offices, can work in tandem with the other forms of action listed above to convince them that they have no choice but to stop arming Israel.

Finally, research like that which is presented in this report does not require any specialized knowledge, equipment, or skills. An Internet connection and

the capacity to organize information suffice. All information contained in this report is publicly available, primarily from news outlets, congressional and parliamentary testimony, academic journal articles, and social media posts. Uncovering companies that are complicit in genocide helps those who are undertaking other forms of action to direct their efforts to the right place and make strategic choices.

All of us have roles to play in stopping this genocide.