

SHIPMENTS FOR SLAUGHTER

MAERSK'S CENTRAL ROLE IN MANUFACTURING AND MAINTAINING F-35 FIGHTER JETS FOR ISRAEL

27 May 2025
Palestinian Youth Movement
maskoffmaersk@gmail.com



Image: Then-Israeli Defense Minister Yoav Gallant sits in front of an F-35 fighter jet, addressing pilots involved in the 13 July 2024 bombing of a designated "safe zone" in Gaza.

Table of Contents

- **1 Executive Summary**
- 3 Background on the F-35
- 5 Maersk Shipments to Lockheed Martin Aeronautics in Fort Worth, Texas
- 7 Maersk and Israel Aerospace Industries
- 9 Maersk and Leonardo S.p.A.
- 10 Maersk and Lockheed Martin Global Inc.
- 12 Maersk and Michelin
- 13 Maersk and Turkish Aerospace Industries Inc.
- 13 Maersk Shipments from Lockheed Martin Aeronautics in Fort Worth, Texas
- 16 Maersk Shipments to Northrop Grumman in Palmdale, California
- 19 Maersk and the BL-1 Loader
- 19 Maersk Vessels Complicit in Transshipment of Arms Components
- 22 Conclusion
- 24 Appendix A: F-35 Tire Contracts
- 25 Appendix B: Imports to Northrop Grumman in Palmdale, California
- 35 Appendix C: Programs within Northrop Grumman, Palmdale, California
- 36 Appendix D: Canadian Companies Contributing to the F-35 Program
- **40 Appendix E: Complicit Routes and Vessels**

Executive Summary

Maersk, one of the world's largest shipping companies, plays a crucial role in the global arms supply chain sustaining Israel's military operations. A previous report by the Palestinian Youth Movement and Progressive International (December 2024) exposed Maersk's role in shipping military goods from the U.S. to the Israeli military. This report expands those findings, revealing Maersk's direct involvement in the F-35 fighter jet program fueling Israel's war on Gaza.

Maersk has shipped the wings for every Israeli F-35 delivered since at least March 2022, including those for five more Israeli F-35s scheduled for delivery by 2028. Maersk's involvement in shipping Israeli F-35 components dates back as early as 2018. Moreover, nearly all maritime shipments of F-35 components to Lockheed Martin Aeronautics (Fort Worth, Texas) and Northrop Grumman (Palmdale, California)—two of the most critical production hubs for the fighter jet program—have been transported by Maersk. Shipments to these fighter jet production hubs have connected suppliers across the U.S., Israel, Italy, the Netherlands, Norway, Turkey, Canada, France, and the United Kingdom, sometimes in violation of those countries' own export laws. Additionally, Maersk facilitates shipments for Israel Aerospace Industries (IAI) and Leonardo, two key defense contractors manufacturing F-35 wings and electronic warfare systems. Between 2019 and 2024, Maersk shipped at least 310 sets of F-35 wings—enough to equip 49.5% of the 611 aircraft delivered globally in that period. Of those aircraft delivered, 18 were F-35I variants delivered to Israel during that same period.

Between 30 December 2019, and 28 January 2025, Maersk facilitated at least **1,009 shipments totaling more than 15.1 million lbs of military goods** tied to global F-35 supply chains, including, but not limited to:

- 404 shipments of aircraft wings and F-35 components sent to Lockheed Martin for manufacturing and repair, including shipments of 270V and 28V batteries delivered from Nevatim Air Base in Israel;
- 459 shipments of aircraft, center fuselage, and avionic components sent to Northrop Grumman for F-35 production;
- 157 shipments of wing shipping containers, wings, center fuselages, and parts to Italian and Israeli wing manufacturers from Lockheed Martin;
- 2 shipments of BL-1 munitions loaders—used to arm F-35s with bombs directly to Elbit Systems;
- Shipments of surface analyzers for jet maintenance, including direct delivery to Israeli air bases.

1

¹ In response to the Mask Off Maersk investigation, the Spanish government blocked the entry of two Maersk vessels. The U.S. government is currently threatening Spain with the possibility of millions of dollars in fines as a result.

Without these shipments, the F-35 would not have the ability to store fuel, power its flight control systems, refuel mid-flight (enabling transatlantic deliveries to Israel), open the gun door, load bombs, or drop bombs—highlighting their indispensability to the weapons manufacturing supply chain that supports the Israeli military.

The findings also highlight how the governments of **Spain**, **Italy**, **Morocco**, and **Egypt** have played an essential role by **enabling the transshipment of military components**, demonstrating their complicity in Israel's activity.

This report presents extensive evidence of Maersk's deep involvement in the production and assembly of military goods, facilitating shipments that ensure Israel's war machine remains fully operational. In conjunction with previous reports, the research presented here implicates Maersk at every stage of the supply chain: from manufacturing components, to assembling weapons, to delivering them for use in Israeli military aggression. These findings underscore the urgent need to hold corporations accountable for their role in enabling occupation and war, and the necessity of collective action.

As Maersk continues to profit from these shipments, it is up to governments, activists, and civil society to confront this supply chain and demand an end to corporate complicity in Israeli military aggression and human rights violations, especially during the ongoing campaign of Israeli genocide in Gaza.

Background on the F-35

The F-35 jet fighter has been an integral component in executing Israel's genocidal war on Gaza. The Israeli Air Force has carried out an unprecedented number of air strikes,² relying heavily on the F-35 jet fighter to carry out these operations; destroying schools, hospitals, and places of worship and killing tens of thousands of Palestinians. The executive officer of the F-35 Program, Michael Schmidt, stated in a U.S. House Subcommittee hearing in December 2023: "Since early October, the F-35 [jet fighter] program has delivered surge support to Israel. Israeli users are achieving exceptional mission capability rates and the aircraft is proving resilient. We're learning a tremendous amount and will apply lessons learned to enhance fleet readiness across the globe."3 The F-35 is capable of carrying a large variety of weapons, including many weapons frequently used by Israel in its genocidal assault on Gaza (See: Figure 1). It can hold all variants of MK80 series bombs, including unguided MK82, MK83, and MK84s, and the JDAM-guided GBU-38, GBU-32, and GBU-31s. These bombs make up the class majority of the bombs dropped on Gaza.⁴ According to research by the Danish NGO DanWatch, these bombs have been used to target tent camps of displaced Palestinians in Gaza, such as those in al-Mawasi on 10 September 2024⁵ and on 13 July 2024.6



Figure 1. CTOL & CV F-35 Weapons Carriage Requirements.7

^{2 &}lt;u>אלף מטרות בעזה, יותר מ-1,000 בלבנון: ההישגים של חיל האוויר במלחמה - ותיעודי התקיפות 29,0</u>0 targets in Gaza, more than 1,000 in Lebanon: The Air Force's Achievements in the War - and the Documentation of the Attacks"], *Mako* (2024) (**Archived**).

^{3 &}quot;Pentagon Looking for Recommendations on F-35", The Cipher Brief (2023).

^{4 &}quot;Analysis: Israel's Gaza bombing campaign is proving costly, for Israel", Al Jazeera (2023).

^{5 &}quot;What's Mawasi, the Israel-designated Gaza 'safe zone' it bombed overnight?", Al Jazeera (2024).

^{6 &}quot;Government exempts F-35 from export licence suspension – on same day evidence emerges Israel used it in attack on Gaza 'safe zone'", Campaign Against the Arms Trade (2024).

^{7 &}quot;Joint Strike Fighter Program Update", F-35 Lightning II Program Office, p. 33 (Archived).

The F-35 program is multinational and is the U.S. Department of Defense's largest acquisitions program.⁸ The production of the F-35 jet fighter is sustained by more than 1,400 suppliers in the U.S. and more than 100 countries around the globe. The global supply chain contributes to 70% of the total cost of the F-35 jet fighter,⁹ underscoring the vast logistics operation that must be built to sustain the F-35 program. Components from international suppliers arrive both by air — as is the case with F-35 parts flown from Britain¹⁰—and by sea. This report highlights the central role of Maersk in facilitating these logistics.

Israel is the only country within the F-35 program with their own unique version of the F-35A called the F-35I Adir. This modified version is antithetical to one of the primary purposes of the Joint Strike Fighter (JSF) program, which is to consolidate the supply chain for a one-size-fits-all solution. This concession was made possible by Israel agreeing to only add onto the F-35 infrastructure. Israel has an active contract and is still awaiting the delivery of 5 F-35s out of the 50 originally ordered. In addition, Israel signed an agreement in June 2024 to procure 25 additional F-35I Adirs, with the first batch of deliveries set to occur in 2028. Therefore, active deliveries of the F-35 to Israel are currently taking place, the latest of which occurred in April 2025. The completed F-35s arrive by air in batches of twos and threes, supported by the U.S. Air Force Air Mobility Command.

The expenditure and procurement of F-35 aircraft and other military assets for Israel are covered under the United States' Foreign Military Financing (FMF) program established by the Memorandum of Understanding (MOU) between the two governments, which is renewed every decade.¹³ The current iteration of the MOU provides Israel with an annual \$3.3 billion in FMF, making Israel the top recipient of military aid through FMF. Foreign states participating in the FMF program are required to purchase weapons manufactured in the United States primarily via Foreign Military Sales (FMS).¹⁴ By October 2023, there were 599 open FMS cases with Israel. In August 2024 the U.S. approved additional FMS with Israel valued at \$20.3 billion, including sales of F-35 fighter jets—among them Israeli variants—missiles, and other military items.¹⁵

^{8 &}quot;New video highlights agency's F-35 support", Defense Logistics Agency (2023).

^{9 &}quot;Statement of Gregory Ulmer, Vice President and General Manager, F-35 Program, Lockheed Martin Corporation", House Armed Services Subcommittees (2019).

^{10 &}quot;Revealed: Hundreds of F-35 components sent from Britain to U.S.", Declassified UK (2024).

^{11 &}quot;New F-35 fighter jets arrive at Israel's Nevatim Airbase", JNS (2025).

¹² The first two F-35s delivered to Israel were <u>flown to Nevatim Air Base</u> in 2016, stopping in Portugal and Italy on the way and <u>refueled mid-flight</u> by the U.S. Air Force's KC-135 Stratotankers. In 2022, three jets were flown to Negev Air Base.

^{13 &}quot;U.S. Security Cooperation with Israel", Bureau of Political-Military Affairs, United States Department of State (2025).

^{14 &}quot;The Security Assistance Process: Explained", Israel Policy Forum (2024).

^{15 &}quot;U.S. approves \$20 billion in weapons sales to Israel", Axios (2024).



Lockheed Martin F-35 fighter jet assembly plant, Fort Worth, Texas. (Lockheed Martin)

Maersk Shipments to Lockheed Martin Aeronautics in Fort Worth, Texas

To understand the key role that Maersk plays in this logistics operation, we analyzed bills of lading for shipments handled by Maersk on behalf of **Lockheed Martin Aeronautics**. Lockheed Martin Aeronautics Co., a major division of **Lockheed Martin Corporation** based in Fort Worth, Texas, is a major assembly site for the F-35 fighter jet, used extensively by the Israeli military. The Fort Worth facility is one of only three global Final Assembly and Check-Out (FACO) facilities for the F-35, with the other two being in Cameri, Italy, and Nagoya, Japan. In 2017, Lockheed Martin moved its F-16 production out of the Fort Worth facility to Greenville, South Carolina, to accommodate expanding F-35 production.

We examined all imports to Lockheed Aeronautics in Fort Worth since 30 December 2019, the results of which are summarized in **Table 1** on the following page.

Of the 501 total imports, Maersk was responsible for 404, all related to the F-35 program. These shipments included over 10.5 million lbs of aircraft wings, aircraft parts, and related F-35 products delivered to Lockheed Martin Aeronautics in Fort Worth, Texas.

¹⁶ Lockheed Martin Aeronautics Co (UEI: FC23EWYF5KN9) (999 Lockheed Blvd., Fort Worth, Texas 76108) and Lockheed Martin Corporation (UEI: L2Y1QCAQHRH5) (1 Lockheed Blvd., Fort Worth, Texas 76108)—are both located in the government-owned, contractor-operated United States Air Force Plant 4 in Fort Worth, Texas. Lockheed Martin Aeronautics has had at least 4 contracts with the U.S. DoD not related to Israel but they have long since concluded, which gives force to the claim that these aircraft wings and part shipments are related to the F-35 supply chain in particular.

^{17 &}quot;F-35 international partnership delivers FACO milestone", Defense Contract Management Agency (2019).

^{18 &}quot;Fort Worth-made F-16 moves out to make room for Lockheed's modern fighter jet", Dallas News (2017).

Product	Number of Shipments	Gross Weight (LB)
ISRAEL AEROSPACE INDUSTRIES LTD	174	2,650,805
OUTER WING BOXES	171	2,629,231
CRATES	2	21,048
BATTERIES	1	526
LEONARDO S.P.A.	165	7,138,860
FULL WING	119	6,235,926
AIRCRAFT PARTS	36	673,724
SHIPPING CONTAINER TRANSPORT DOLLY	6	118,800
J420 CONTAINER	3	110,271
BATTERIES	1	139
LOCKHEED MARTIN ISRAEL LTD	30	317,491
OUTER WING BOXES	20	295,356
BATTERIES	8	2,601
CRATES	2	19,534
LOCKHEED MARTIN ITALY	10	7,997
BATTERIES	9	1,430
AIRCRAFT PARTS	1	6,567
LOCKHEED MARTIN NETHERLANDS	8	18,465
BATTERIES	6	1,245
CRATES	2	17,220
MICHELIN FRANCE	8	187,396
TIRES	8	187,396
TUSAS-TURK HAVACILIK VE UZAY	6	191,664
CENTER FUSELAGE	6	191,664
LOCKHEED MARTIN NORWAY	3	440
AIRCRAFT PARTS	2	290
BATTERIES	1	150
GRAND TOTAL	404	10,513,118

Table 1. Maersk Shipments to Lockheed Martin Aeronautics in Fort Worth, Texas, 30 December 2019–28 Jan 2025.

Maersk and Israel Aerospace Industries

Israel Aerospace Industries Ltd. (IAI) is an Israeli state-owned aerospace and aviation manufacturer heavily involved in the F-35 supply chain, and it was implicated in exports from illegal settlements in a previous Mask Off Maersk report, "Maersk's Role in Facilitating Exports from Illegal Israeli Settlements to the U.S." (23 January 2025). IAI is one of three suppliers for F-35 wings, alongside Leonardo in Cameri, Italy, and Lockheed Martin in Fort Worth, Texas.¹⁹ IAI's Israeli parts are part of the broader F-35 supply chain that eventually return to Israel as the F-35I Adir. According to Lockheed Martin, the F-35I Adir adds capabilities to the standard F-35A in three areas: command, control, communications, computers, and intelligence (C4I); electronic warfare (EW); and weapons integration.²⁰ Lockheed Martin collaborates with the IAI's Lahav Division to develop the C4I modifications.²¹

Our findings confirm that Maersk has transported at least 174 shipments from IAI to Lockheed Martin Aeronautics Co. in Fort Worth since 30 December 2019. These shipments originated from Ben Gurion Airport or the Industrial Zone outside it, where IAI has its main manufacturing facility and east facility, respectively.²²

Air Force	Number of Outer Wing Box Pairs
United States Air Force (AF)	122
Israeli Air Force (AS) ²³	21
Royal Australian Air Force (AU)	17
Polish Air Force (AZ) ²⁴	12
Finnish Air Force (MF) ²⁵	6
Japan Air Self-Defense Force (AX) ²⁶	6
Belgian Air Component (AY) ²⁷	3
Republic of Korea Air Force (AW) ²⁸	2
German Air Force (MG) ²⁹	2
TOTAL	191

Table 2. Maersk Shipments of F-35 Wing Pairs from Israel Aerospace Industries and Lockheed Martin Israel to Lockheed Martin Aeronautics in Fort Worth, Texas, 30 December 2019–28 Jan 2025.

^{19 &}quot;Building Wings for the F-35: Israel, Italy and Fort Worth Shape a 21st Century Capability", Second Line of Defense (2016).

^{20 &}quot;With stealth and electronic capabilities far surpassing Israel's other aircraft, the F-35 will introduce massive advances for", Air & Space Forces Magazine (2017).

^{21 &}quot;Israel's F-351 Fighter's C4 Systems Enter Production at IAI", Israel Aerospace Industries (2016).

²² The addresses were "INDUSTRIAL ZONE LOD BEN GURION INTERNATIONAL AIRPORT BEN GURION IL" or "BEN GURION INT'L AIRPORT LOD 71200 ISRAEL."

^{23 &}quot;Three more Israeli F-35I delivered", AirForces Monthly (2022).

^{24 &}quot;Poland and Lockheed Martin Celebrate Debut of Poland's First F-35A 'Husarz'", Lockheed Martin (2024).

^{25 &}quot;Build begins of first F-35 for Finland", Janes (2024).

^{26 &}quot;Japan", F35.com.

^{27 &}quot;Belgium", F35.com.

^{28 &}quot;Republic of Korea", F35.com.

^{29 &}quot;Germany's First F-35A Enters Production at U.S. Facility", Militarnyi (2024).

Of the 174 shipments, 171 shipments contained pairs of outer wing boxes, each tied to a specific F-35 by constructor's number (c/n). In the bills of lading, 159 of these shipments were obscured and labelled as "aircraft parts." **Table 2** on the previous page shows all shipments of outer wing box pairs where shippers are listed as Israel Aerospace Industries or Lockheed Martin Israel Ltd, divided by air force. Outer wing boxes shipped by Lockheed Martin Israel Ltd originated from Israel Aerospace Industries, as Lockheed Martin Israel does not have any facilities to produce wing boxes. Combining the 171 shipments from IAI and 20 shipments from Lockheed Martin Israel, Maersk shipped 191 wing boxes for American, Israeli, Australian, Polish, Finnish, Japanese, Belgian, Korean, and German F-35s. Maersk shipped wings for 21 Israeli F-35s with c/n AS-28 and AS-31 through AS-50. Given that the shipment records date back as early as 24 March 2022, after jets AS-31, AS-32, and AS-33 arrived in Israel, we can infer that Maersk has been shipping the wings for every Israeli F-35 delivered at least since March 2022.

In 2018, Maersk delivered a shipment with the description "AS 17 F-35 Outer Wing Box" from Lockheed Martin Aeronautics in Fort Worth to Lockheed Martin Israel in 70100 Ben Gurion, Israel. This shipment indicates a long history of Maersk involvement in the F-35 wing supply chain supporting the Israeli Air Force.

The wing boxes are officially known as J461/J462 wing assemblies. The J461 and J462 assemblies are intermediate stages of assemblies for the F-35 jet fighter. An analysis of the manufacturing process for the F-35 reveals that the J461/J462 step combines paired upper and lower wing skins with wing-to-body fairings for the left and right wings (see **Figure 2**).³¹ IAI has manufactured F-35 wing skins in Israel since 2015.³² These intermediate assemblies are manufactured and shipped by IAI to Fort Worth in specialized containers that enable safe shipping by ocean.³³

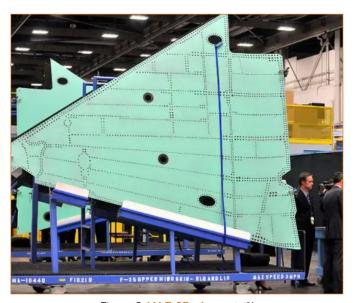


Figure 2. IAI F-35 wing sets.34

^{30 &}quot;Three more Israeli F-351 delivered", AirForces Monthly (2022).

^{31 &}quot;Joint Strike Fighter F-35 IUID Program Implementation", Lockheed Martin Aeronautics (2011), p. 7 (Archived).

^{32 &}quot;IAI Inaugurates New Line for F-35 Wing Skins", IAI North America.

^{33 &}quot;Internship Report Lockheed Martin Aeronautics Company", Terma (2016) (Archived).

^{34 &}quot;Israel Aerospace Industries launches production line of F-35 Lightning II stealth fighter jet wings", Army Recognition (2014).

Aside from the J461 and J462 assemblies, Maersk made one delivery of 270V batteries and two deliveries of empty crates, the significance of which will be discussed below.

Maersk and Leonardo S.p.A.

Since **30 December 2019**, the Italian aerospace and defense company Leonardo S.p.A. has exported **165 shipments of parts, wing boxes, and related wing products from Italy to Lockheed Martin Aeronautics in Fort Worth, Texas—all transported on Maersk vessels.** Leonardo S.p.A. manufactures F-35 wing components and full-wing assemblies, and produces completed wings for F-35 jets assembled in the U.S., in addition to operating the final assembly of F-35s in Cameri, Italy.³⁵ Of the 165 shipments, 119 shipments included J420 assemblies of full wings, each tied to a specific F-35 (see **Figure 3** and **Figure 4**). These wings were for American, Danish, Norwegian, Australian, Belgian, and Turkish F-35s (see **Table 3**).

Air Force	Number of Full Wings
United States Air Force (AF)	78
Royal Danish Air Force (AP) ³⁶	14
Royal Norwegian Air Force (AM) ³⁷	14
Royal Australian Air Force (AU)	6
Belgian Air Component (AY)	6
Turkish Air Force (AT) ³⁸	1
TOTAL	119

Table 3. Maersk Shipments of F-35 Full Wings from Leonardo S.p.A. to Lockheed Martin Aeronautics in Fort Worth,
Texas, 30 December 2019–28 Jan 2025, divided by Air Force.

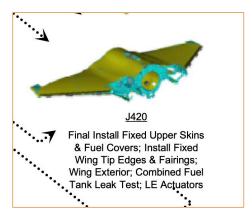


Figure 3. Step J420 in the F-35A Assembly Flow Diagram.³⁹



Figure 4. A full wing-set, produced by Finmeccanica-Alenia Aermacchi in Cameri, Italy, being entered into the Electronic Mate and Assembly (EMAS) where the forward fuselage was assembled at Fort Worth.⁴⁰

^{35 &}quot;F-35 Lightning II", Leonardo.

^{36 &}quot;Denmark's first F-35A takes flight", Key Aero (2021).

^{37 &}quot;Lockheed Martin unveils first Royal Norwegian Air Force F-35A", The Aviationist (2015).

^{38 &}quot;TurAF F-35A Makes its Maiden Flight", Defence Turkey (2018).

^{39 &}quot;Joint Strike Fighter F-35 IUID Program Implementation", Lockheed Martin Aeronautics (2011), p. 7 (Archived).

^{40 &}quot;Building Wings for the F-35: Israel, Italy and Fort Worth Shape a 21st Century Capability", Second Line of Defense (2016).

The remaining 48 shipments consisted of 36 shipments of unspecified aircraft parts, 1 shipment of lithium ion batteries, 3 shipments of J420 containers, and 6 shipments of shipping container transport dollies. Lockheed Martin uses specialized shipping containers and dollies for transporting the J420 full wing, shown in **Figure 5** below.

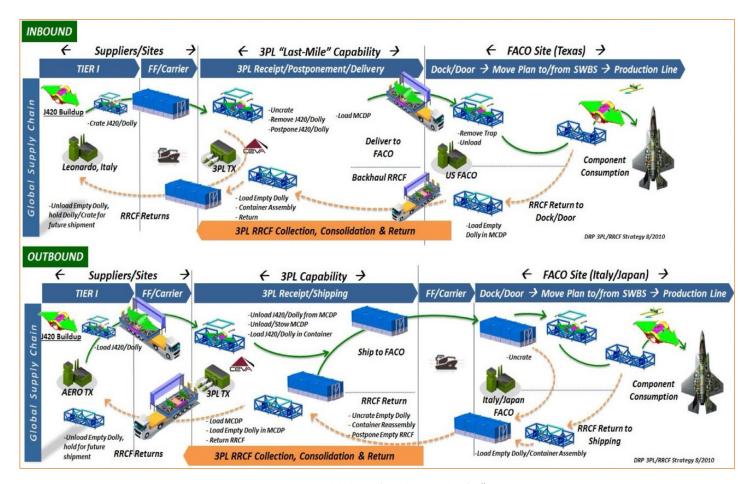


Figure 5. J420 Container Supply Chain.41

Maersk and Lockheed Martin Global Inc.

The global supply chain of the F-35 requires Lockheed Martin to ship between its global offices. Since **30 December 2019**, Maersk has made 51 shipments from Lockheed Martin facilities around the world to Lockheed Martin Aeronautics in Fort Worth, Texas, with 30 originating in Israel, 10 originating from Italy, eight originating from the Netherlands, and three from Norway.⁴² Three of the 51 shipments contained unspecified aircraft parts. 24 contained batteries for the F-35, and 20 contained J461/J462 wing assemblies from IAI, as discussed in the section above. Four shipments contained empty crates for repair, which are likely the custom wing enclosures designed in Fort Worth to ship the J461/J462 assemblies (see **Figure 6**).

^{41 &}quot;NextGen Asset Management Technologies and the Digital Transformation Revolution", RFID Journal (2022)

⁴² The shipments from Israel had the shipper listed as "LOCKHEED MARTIN ISRAEL LTD," while the others either listed "LOCKHEED MARTIN GLOBAL INC", "LOCKHEED MARTIN GI", or "LOCKHEED MARTIN C/O."

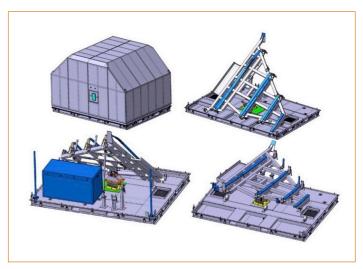


Figure 6. 3D model of containers for J461/462 wing assemblies. 43

Bills of lading show shipments of 270 volt and 28 volt batteries at 40 kgs and 14 kg respectively. Saft, a French company with locations in the U.S., was awarded a \$6.5 million contract with Lockheed Martin for 270 volt and 28 volt batteries for the F-35.⁴⁴ While the voltage specifications are standard military aircraft voltages per MIL-STD-704, Saft's 270 volt F-35 battery is 40 kgs, and their 28 volt F-35 battery is 14 kgs.⁴⁵ The F-35's 270 volt, 40 kg battery provides start-up and emergency fill-in power for high-demand systems such as control actuators, and its 28 volt, 14 kg battery supports start-up and fill-in power for lower power systems.⁴⁶ Both battery types are installed at the Fort Worth, Texas, facility during the construction of the F-35 subassembly J850.

Origin	Number of Battery Shipments With Temporary License Exemption	Total Number of Battery Shipments	
Nevatim Air Base, Israel	7	8	
Amendola Air Base, Italy	5	5	
Cameri Air Force Base, Italy	1	4	
Volkel Air Base, the Netherlands	4	4	
Leeuwarden Air Base, the Netherlands	2	2	
Ørland Main Air Station, Norway	1	1	
Lockheed Martin Tel Aviv Office	0	1	
Leonardo Rome Office	1	1	
TOTAL	21	26	

Table 4. Maersk Shipments of Batteries to Lockheed Martin Aeronautics in Fort Worth, Texas, 30 December 2019–28 Jan 2025, divided by origin.

^{43 &}quot;Internship Report Lockheed Martin Aeronautics Company", Terma (2016), p. 11 (Archived).

^{44 &}quot;Saft Awarded \$6.5 Million Contract to Pioneer High Power Li-ion Aviation Battery Capabilities for F-35 | Business Wire", Business Wire (2013).

^{45 &}quot;Li-lon Safety", Saft (2013).

^{46 &}quot;Air power: why the newest fighter jet carries Li-ion batteries", Saft; "Li-lon Safety", Saft (2013), p. 16.

Of the 26 total battery shipments by Maersk, 21 mentioned 22 CFR § 123.4 (a)(1), and 24 of the 26 originated from F-35 bases (see **Table 4**). 22 CFR § 123.4 (a)(1) is a regulation which allows a temporary import license exemption for "unclassified U.S.-origin defense items (including any items manufactured abroad pursuant to U.S. Government approval)" when items are sent for servicing and returned to their original country of export. Teight of these shipments came directly from the Israeli Air Force's Nevatim Air Base. Of those, seven cited the exemption for repair, and four took place after October 7, 2023. **These shipments demonstrate that Maersk plays a critical role in the global maintenance network sustaining Israel's fleet of F-35s, including the F-35s central to the bombing campaign in Gaza.**

These batteries likely originate from GE Aerospace in Cheltenham, United Kingdom. Saft has been supplying batteries to GE Aviation since 2006,48 and the batteries integrate into General Electric Aviation's Electrical Power Management System.49 GE Aviation produces the Electrical Power Management Systems in Cheltenham, UK.50 Two shipments of 270V batteries from Lockheed Martin Netherlands included "COUNTRY OF ORIGIN: GB" in the product description, cited 22 CFR § 123.4 (a)(1), and were picked up from Volkel Air Base, one of the Netherlands' two F-35 bases.51 While these shipments depart from the Volkel Air Base, they originate from the UK.

Maersk and Michelin

Since 30 December 2019, Maersk has made eight shipments of tires from Michelin in France to Lockheed Martin Aeronautics in Fort Worth, Texas. Michelin, a French tire company, is the primary supplier of the tires for the F-35A variant (see Figure 7), which Israel uses (see Appendix A: Tire Contracts). Additionally, it supports Lockheed Martin in delivering replacement tires to deployed F-35s owned by the Air Force and 13 nations involved in Foreign Military Sales (FMS), including Israel.⁵³



Figure 7. A photo of a Michelin Tire for the F-35, with a marking reading "CTOL."52

^{47 &}quot;22 CFR § 123.4 - Temporary import license exemptions." Cornell Law School Legal Information Institute.

^{48 &}quot;Saft fournira de nouvelles batteries au F-35, l'avion de combat américain [Saft will supply new batteries to the F-35, the American fighter jet]", La Tribune (2013).

^{49 &}quot;Saft to infuse F-35 with high-power Li-ion aviation battery power", Military Aerospace (2013).

^{50 &}quot;GE Aerospace delivers 1,200th Avionics and Power systems across global F-35 fleet", GE Aerospace (2023).

^{51 &}quot;Volkel Air Base", Defensie.nl.

^{52 &}quot;How To Change Tire On \$100 Million Dollars Plane - F-35 Tire Swap", AirSource Military (2015).

^{53 &}quot;Precise Tire Forecasts Keep Aircraft Ready to Roll", Lockheed Martin (2016).

Maersk and Turkish Aerospace Industries Inc.

Since **30 December 2019**, Maersk has made six shipments of center fuselages from "TUSAS-TURK HAVACILIK VE UZAY", or Turkish Aerospace Industries Inc. (TAI) to Lockheed Martin Aeronautics in Fort Worth, Texas. Turkish Aerospace Industries is a second-source supplier and subcontractor to Northrop Grumman,⁵⁴ and it delivered its first center fuselage to Northrop Grumman and Lockheed Martin in 2013.⁵⁵ The 6 center fuselages delivered by Maersk were sent in 2022 for U.S. Air Force F-35s.

Maersk Shipments from Lockheed Martin Aeronautics in Fort Worth, Texas

An analysis of exports from F-35 facilities in the U.S. reveals that Maersk has facilitated at least 157 F-35 related exports, with 80 going to Cameri, Italy, and 77 going to Israel Aerospace Industries in Israel (see **Table 5**). The exports to Italy included 27 center fuselages for Italian and Dutch F-35s from Palmdale, California, four full wings from Fort Worth, Texas, for Italian F-35s, and one lift fan exhaust from Fort Worth, Texas, for an F-35B. **Additionally, Maersk has shipped 125 wing shipping containers, totaling 1,432,585 lbs.** Of these 125 shipments, 48 shipments originated from Lockheed Martin in Fort Worth, Texas, and traveled to Cameri, Italy. These shipments mentioned "J420 Container" in the product description. J420 in the production process describes the final stage of the full wing set before being connected to the center and forward fuselages, as shown in **Figure 3**. These containers are then filled with completed wings and wing boxes and shipped back to Fort Worth for installation on an F-35.

Product	Number of Shipments	Weight (lbs)
ISRAEL	77	1,107,036
SHIPPING CONTAINERS	77	1,107,036
ITALY	80	2,933,038
J420 CONTAINER	48	2,051,274
CENTER FUSELAGE	27	676,440
FULL WING	4	204,465
LIFT FAN EXHAUST DOOR	1	389
GRAND TOTAL	157	4,040,074

Table 5. Maersk Exports from Lockheed Martin Aeronautics in Fort Worth, Texas, 30 December 2019–28 Jan 2025.

^{54 &}quot;TAI delivers first center fuselage for Turkey's F-35A fighter jets", Army Recognition (2017).

^{55 &}quot;TAI supplies first F-35 centre fuselage to Northrop and Lockheed", Airforce Technology (2013).

⁵⁶ These explicitly mentioned the constructor's numbers (c/n) of the planes AL34 to AL40, AN47 to AN50, AN52, BL11, and BL12. F-35s with c/n beginning in AL and BL go to Italy, while those with constructor's numbers beginning in AN go to the Netherlands.

⁵⁷ Product descriptions mentioned "BL09 FULL WING", "BL10 FULL WING", "BL11 FULL WING" and "BL12 FULL WING."

The specialized containers required to ship wings travel between Lockheed Martin facilities and suppliers on a schedule to meet the demands of each facility, confirmed by the shipping map in **Figure 8**. Moreover, the table in the top left of the map suggests that J420 requires specialized containers and travel only by ocean, while wings in the J461/J462 step of production travel on specialized containers by ocean and air. According to a researcher who worked on the tracking and monitoring system for these containers, "every component being shipped to or from Fort Worth has a deadline, and is scheduled to be mated to a specific aircraft on the production line. In order to avoid delays on the production line, all parts therefore have to arrive on time and without damage."

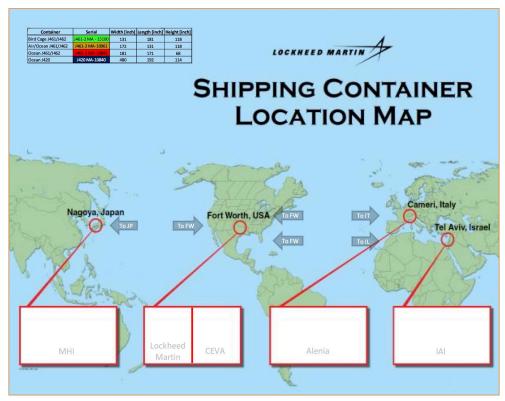


Figure 8. Status map for Shipping Containers.⁵⁸

Of the 125 container exports, 77 shipments traveled from Lockheed Martin Aeronautics in Fort Worth to Israel Aerospace Industries. These shipments departed from the Port of Houston and were transshipped through the Port of Algeciras, Spain. However, following the Spanish government's blocking of two Maersk shipments on 7 November 2024, subsequent shipments were rerouted through the Port of Rotterdam. Each of the 77 shipments included a number for the right and left shipping containers in the product description, including all numbers in the range 1 to 27.59 These codes appeared multiple times, typically spaced about 6 months apart. This suggests a recurring six-month cycle: an empty container departs from Lockheed Martin in Fort Worth, arrives at IAI in Israel where it is loaded with a wing, returns to Fort Worth for installation on an F-35, and then is shipped out again from the Port of Houston to repeat the cycle.

^{58 &}quot;Internship Report Lockheed Martin Aeronautics Company", Terma (2016), p. 7 (Archived).

⁵⁹ For example, one shipment's product description was "SHIPPING CONTAINER - 27L AND 27R."

This cycle is corroborated by five bills of lading that document shipments completing the full route. For example, the shipment of the J420 container with bill of lading number 238351530 shows the 40' flat container MA108401U27 departing Houston on 21 April 2024, arriving in Algeciras on 7 May, departing Algeciras on 15 May, and arriving in Genoa on 24 May. It was then loaded in Genoa on 4 August, discharged in Houston on 30 August, reloaded at the Port of Houston on 22 September, arrived in Algeciras on 6 October, departed again on 8 October, and arrived back in Genoa on 14 October.

The same pattern exists for bill of lading numbers 235911060 and 233562558. Two others—235002710 and 234617791—also show this same pattern, however their second trips from Houston were transshipped through Tangier on 11 November and Algeciras on 12 November 2024, respectively.

For example, containers 5L and 5R carried two pairs of wings for Israeli F-35s across two consecutive logistics cycles. On the first leg of the initial trip, the empty containers departed from Houston on the Maersk Chicago on 4 February 2024, arrived at Algeciras on 16 February, departed from Algeciras on the Nexoe Maersk on 19 February, and arrived at the port of Haifa on 1 March. Subsequently, Israel Aerospace Industries loaded the containers with wings for AS-48—Israel's 48th F-35 that has yet to be delivered. On the second leg of the trip, the now-filled containers departed from the Port of Haifa on the Wanda A on 9 May 2024, arrived in Algeciras on 23 May, departed from Algeciras on the Maersk Detroit on 27 May, and arrived at the port of Houston on 12 June.

About a month later, the cycle restarted. On the first leg of the new trip, the empty containers departed from Houston on the Maersk Hartford on 28 July 2024, arrived at Algeciras on 12 August, departed from Algeciras on the Nysted Maersk on 17 August, and arrived at the port of Haifa on 29 August. Israel Aerospace Industries then loaded the containers with wings for AS-50, Israel's 50th F-35 that also has yet to be delivered. On the return leg of the trip, the wings departed Haifa on the Nexoe Maersk on 8 November 2024, arrived at Tangier Med on 24 November, departed from Tangier Med on the Maersk El Palomar on 7 December, arrived at Bremerhaven on 12 December, departed from Bremerhaven on the Maersk Kansas on 29 December, and arrived in Norfolk on 9 January 2025.

As reported by *Declassified UK* and *The Ditch*, most shipments of F-35 components are shipped by air from storage facilities in U.S. military bases, coordinated by the Defense Logistics Agency.⁶⁰ However, spare parts and tools for repair occasionally get shipped by sea, including on Maersk vessels. One such shipment occurred in April 2025, when Maersk shipped surface analyzers from Lockheed Martin Aeronautics in Fort Worth, Texas, to Nevatim Air Base in Israel aboard the Maersk Detroit and Nexoe Maersk. To learn more, read Mask Off Maersk's "<u>Technical Briefing on Maersk and F-35 Shipments.</u>"

^{60 &}quot;Revealed: Hundreds of F-35 components sent from Britain to U.S.", Declassified UK (2024).

Maersk Shipments to Northrop Grumman in Palmdale, California

While Lockheed Martin is the prime contractor for the F-35 Strike Fighter program, other military weapons contractors—such as Northrop Grumman and BAE systems—also play significant roles in F-35 production. Northrop Grumman, in particular, is responsible for key components, such as software, systems, and the center fuselage.⁶¹ In 2015, it delivered the center fuselage for Israel's first F-35, the AS-01.⁶² The center fuselage is the center section of the main body of the plane, which houses the engine and contains major fuel tanks, weapons bays, and key avionic systems (see Figure 9). Northrop Grumman uses their Integrated Assembly Line (IAL) in Palmdale, California to produce the center fuselage for all three variants of the F-35.⁶³ This facility produces these center fuselages at a pace of one complete assembly per thirty hours.⁶⁴ While other contractors exist to support the production of F-35 center fuselages in Turkey and Germany, this facility is the primary site of F-35 center fuselage production.⁶⁵

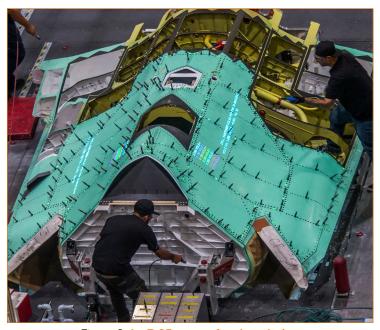


Figure 9. An F-35 center fuselage being assembled in Palmdale, California.66

This report examined all imports of Northrop Grumman in Palmdale. California since 30 December 2019 and found that all 459 shipments were shipped by Maersk and contained aircraft parts, assays, skins, and other F-35 components (see Table 6). All 459 shipments were shipped from Rotterdam in the Netherlands. Bills of lading listed Northrop Grumman International Trading Inc. as the shipper and listed the shipping address of an Amsterdam office of SEKO Logistics, one of Northrop Grumman's chosen freight forwarders.⁶⁷ These 459 shipments contained 471 products totaling 563,963 lbs.68

^{61 &}quot;Joint Strike Fighter Program Update", F-35 Lightning II Program Office, p. 5 (Archived).

^{62 &}quot;Northrop Grumman Delivers Center Fuselage for First Israeli F-35 Aircraft", Northrop Grumman (2015).

^{63 &}quot;F-35 components agreement signed by Northrop Grumman Australian supplier Quickstep", Military Aerospace (2011).

^{64 &}quot;Northrop Grumman's F-35 Integrated Assembly Line", Northrop Grumman (2024).

⁶⁵ The role of Turkish Aerospace Industries as a second source supplier for Northrop Grumman is discussed above. In Germany, Rheinmetall is developing a <u>second center fuselage IAL</u> to support Northrop Grumman that is expected to <u>start production in 2025.</u> 66 "F-35 Lightning II Program", Northrop Grumman (2023), p. 8.

⁶⁷ The listed shipper address is NARITAWEG 2 1437 EL ROZENBURG NH NETHERLANDS 31181290934, corresponding to a **SEKO logistics office**. The 'Shipping and Receiving' page of Northrop Grumman's website includes a link to a SEKO logistics login portal under 'Logistics Information', confirming Northrop's use of SEKO as a freight forwarder.

⁶⁸ Four shipments contained the same product description, which listed 13 products. These shipments were determined to be Less-than-container-load (LCL) shipments because the combined weights in the description was equal to the combined weight of the shipments, and the bills of lading listed the same container numbers. Given this, the number of products shipped exceeded the number of shipments.

Product	Description	Product Count	Gross Weight (lbs)
AIRCRAFT PARTS	Unspecified aircraft parts	273	123,534
SKIN ASSY	Skins for panels on the center fuselage, including right-hand and left-land, upper and lower, forward, and strap skins	99	233,134
TANK ASSY	An assembly for the fuel tank, found in the center fuselage	30	92,970
LWR INSTL, CENTER	Likely: An installation on the lower side of the aircraft in the center fuselage	19	54,522
UNKNOWN	Shipments with no information in the description other than volume and weight	15	10,532
SHROUD FAIRING, LIFT FAN TUNNEL	The panel that covers the lift fan of the F-35B and opens during vertical landing	4	6,306
STOVL AIR INLET	An air inlet for the engine of the F-35B, housed in the center fuselage	3	16,100
IPP ASSY A-6	An assembly for the Integrated Power Package (IPP), found on the left side of the center fuselage.	3	582
IFRR DOOR ASSY	Door assemblies for the In-Flight-Refuel-Receptacle doors, found on both the right and left-hand slides of the center fuselage and used to refuel the aircraft on long trips, including deliveries of completed jets from the U.S. to Israel	3	7,337
DOOR ASSY, WBD	Weapons Bay Doors (WBD), located on the bottom of the center fuselage	3	8,425
AAI SIDE PANEL ASSY	A panel for the auxiliary air inlet of the F-35B that opens to provide additional air to the lift fan	3	3,675
LWR ASSY	An unspecified assembly for the lower section of the aircraft	2	3,388
GUN/GAS ACTUATOR DOOR	An actuator door for the Internal 25mm 4-Barrel Gatling Gun, located near the left wing	2	27
SYNCORE DUCT	A skin for the air inlet duct, produced by Syncore	1	486
PANEL ASSY, ICC-PDC	A panel assembly for the Inverter/Converter/Controller (ICC) for the engine starter/generator system made by Power Device Corporation (PDC)	1	115
PANEL ASSY, F2 FUEL	A panel for the F2 fuel tank cover	1	150
PAINT INLET DUCT	A painted air inlet duct for the F-35 engine, housed in the center fuselage	1	653
FWD DOOR ASSY	A forward door assembly	1	401
FINAL ASSY, LFI DOOR	A door assembly for the Lift Fan Inlet for the B variant	1	64
FINAL ASSY, LFE DOOR	A door assembly for the Lift Fan Exhaust for the B variant	1	157
F2 FUEL ASSY	An assembly related to the F2 fuel tank cover, produced by Quickstep Holdings	1	1,000
DRAG BRACE DOOR ASSY	A door assembly for drag braces, which are linkage arms that support the main shock columns in the landing gear	1	137
CONTL UNIT, ISOLAT	Likely: isolation for a control unit, isolating electrical components for a specific system	1	17
AVIONICS BAY DOOR ASSY	"A door assembly for the avionics bay that houses avionics systems for communications, navigation and identification.'	1	44
ARRESTING HOOK ASSY	An assembly for an arresting hook, used for rapidly decelerating a jet for emergency landings or landings on aircraft carriers	1	207
GRAND TOTAL		471	563963

Table 6. Maersk shipments to Northrop Grumman, Palmdale, California, 30 December 2019–28 January 2025.

According to a flow diagram by the JSF program, Northrop Grumman produces the jet up to step J300 before sending the subassembly to Fort Worth, Texas. 160 of the 471 products contained components directly tied to the production process of the F-35. These included skins, fuel tank and refueling components, weapons bay components, landing gear components, and power system components. For further details on the specific parts, their roles, and their locations on the jet, please refer to **Appendix B: Imports to Northrop Grumman**.

Most of the shipments contained vague or unidentifiable descriptions, with 273 simply listing "AIRCRAFT PARTS" and 15 having no details beyond package size and weight. Additionally, 23 shipments had generic labels such as "forward door assembly" and "lower assembly," which could not be definitively tied to the F-35 production process.⁶⁹ However, given evidence that F-35 wing parts were obscured by Lockheed Martin through ambiguous labels (see: Maersk and Israel Aerospace Industries, page 7), and the fact that the other aircrafts produced at the Northrop Grumman Palmdale facility do not have international suppliers (see: Appendix C: Programs within Northrop Grumman), it can reasonably be concluded that these shipments are for the F-35 supply chain.

Several of the components shipped by Maersk to Northrop Grumman in Palmdale, California, integrate with components from Canadian F-35 suppliers. Bulkheads produced by ASCO Aerospace Canada Ltd. in British Columbia serve as the skeleton of the center fuselage, and the panels and skins shipped by Maersk are built around them.⁷⁰ The Integrated Power Package, shipped by Maersk, is a subsystem of Honeywell's Power and Thermal Management System (PTMS).

An analysis of cargo documents revealed shipments of these systems from Honeywell in Mississauga, Canada, to Lockheed Martin Aeronautics in Fort Worth, Texas, traveling on American Airlines flight AA1169 from Toronto Pearson International Airport to Dallas-Fort Worth International Airport. The weapons bay doors shipped by Maersk require shims to open and close, which are developed by Stelia Aerospace in Lunenburg, Nova Scotia.⁷¹ Additionally, the Stelia Aerospace website lists fuselage panels, like the ones shipped by Maersk, among the F-35 products it produces, ⁷² although the shipments do not mention a shipper. The main landing gear, whose doors and drag brace are shipped by Maersk, utilizes Héroux-Devtek's door uplock system to lock in the up position when in flight, which is manufactured in Laval, Quebec.⁷³ Based on an analysis of cargo documents, these uplock assemblies are shipped by FedEx from Montreal-Dorval Airport to Indianapolis Airport on flight FX153 and then from Indianapolis Airport to Dallas-Fort Worth International Airport on flight FX1735. These shipments highlight the critical role Canadian components play in the F-35 program. While obscured bill of lading data conceals the origin of international shipments to the Palmdale facility and export loopholes conceal Canadian F-35 exports to the U.S., it is clear that Canadian components are crucial in the manufacturing of the F-35. For additional information on Canada's role in the F-35 program, see Appendix D.

⁶⁹ These generic descriptions were for "LWR INSTL, CENTER", "LWR ASSY", "FWD DOOR ASSY", and "CONTL UNIT, ISOLAT."

^{70 &}quot;B.C. to benefit from \$19-billion Canadian pact to buy F-35 fighter jets", Business in Vancouver (2023).

^{71 &}quot;Handcrafting history continues in Lunenburg as aerospace company builds parts for F-35 jet | CBC News", CBC (2022).

^{72 &}quot;Products", Stelia North America.

^{73 &}quot;HÉROUX-DEVTEK RECOGNIZED BY LOCKHEED MARTIN AS A TOP PERFORMING SUPPLIER ON THE F-35 LIGHTENING II PROGRAM", Héroux-Devtek (2016).

Maersk and the BL-1 Loader

On 21 February 2022 and 18 January 2023, Maersk transported two shipments containing a total of five BL-1 munitions loaders, weighing 25,703 lbs, from US Advanced Systems LLC in Twinsburg, Ohio, to the Elbit Systems Land Soltam Plant in Yokneam and the Israel Military Industries facility in Ramat Hasharon (now under Elbit Systems Land) respectively. The BL-1 munitions loader is used to load munitions onto F-35 jets, and the US Advanced Systems LLC website mentions that the BL-1 is the Israeli Air Force's preferred loader for the F-35 (see Figure 10).74 By shipping the munitions loaders to a close partner of the Israeli Air Force, Maersk enables the execution of F-35 airstrikes.



Figure 10. The Israeli Air Force loading munitions on an F-35 using the BL-1 loader.⁷⁵

Maersk Vessels Complicit in Transshipment of Arms Components

The "transshipment model", in which multiple ships perform different legs of a journey, is a crucial part of how the Israel–U.S. military logistics supply chain is maintained. Analysis in the <u>first Mask Off Maersk report</u> showed that incoming military cargo on U.S.-flagged Maersk ships is transshipped to Israel from Algeciras on five vessels: the NYSTED MAERSK, the NEXOE MAERSK, the WANDA A, the MARIO A, and the MAERSK NORFOLK. This report's data shows similar patterns, with the shipments of light ammunition components being transhipped on four of the five ships—WANDA A, the MAERSK NORFOLK, the NEXOE MAERSK, the NYSTED MAERSK—as well as on the CINDY. For a full list of routes and complicit vessels, see Appendix E.

From 10 November 2023 to 22 September 2024, shipments of wing containers to Israel were mostly transhipped in Algeciras on the MAERSK KARACHI, MAERSK NORFOLK, MARIO A, NEXOE MAERSK, NYSTED MAERSK, and WANDA A. However, six shipments transshipped through Port Said on the Maersk Dakar. Shipments of J420 containers to Italy were transshipped exclusively in Algeciras on the MAERSK NUBA, MARTHA A, and TEOMAN A (see **Figure 11**).

^{74 &}quot;<u>US Advanced Systems LLC</u>", US Advanced Systems LLC.

^{75 &}quot;BL-1 - Loading F-35 at USAF", US Advanced Systems LLC.

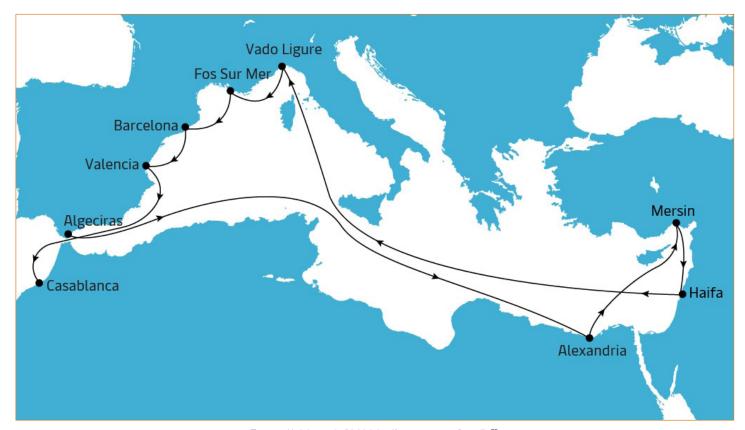


Figure 11. Maersk SLH Mediterranean Sea B.75

This analysis shows that since **30 December 2019**, Israel has exported **404 shipments of F-35 parts to Lockheed Martin Aeronautics in Fort Worth, Texas, via Maersk**—204 of which originated in Israel. We examined vessels departing Israel carrying these categories of shipments to Lockheed Martin Aeronautics since November 11th, 2023. Up until October 26, 2024, these shipments were carried by **the same five ships—NYSTED MAERSK**, **NEXOE MAERSK, WANDA A, MARIO A** and **MAERSK NORFOLK**—that carry military cargo from Spain to Israel. **These five ships are therefore complicit not only in transporting Israeli-bound military cargo, but also in facilitating outbound shipments between Israel and the U.S.**

For example, on 14 September 2024, the NEXOE MAERSK departed Haifa Port carrying 15,000 lbs of aircraft parts from **Israel Aerospace Industries**. It arrived at the Port of Algeciras, Spain, on 27 September 2024 and unloaded these goods.⁷⁷ Then, on 7 October 2024, the MAERSK SELETAR picked up these items and sailed across the Atlantic, docking at Port Elizabeth, NJ, before the items were ultimately delivered to **Lockheed Martin Aeronautics** in Fort Worth, Texas, on 26 October 2024.

^{76 &}quot;SLH Mediterranean Sea B", Maersk (Archived).

⁷⁷ Product Description: "2 CRATES WITH 2 UNITS OF AIRCRAFT PARTSJ461,J462".

Although Maersk primarily utilizes a transshipment model involving two separate vessels for each leg of the journey, it sometimes uses a single vessel for the entire trip. For example, the MV Sagamore carried two shipments of full wings for Australian F-35s the entire journey from Leonardo S.p.A. to Lockheed Martin Aeronautics. On a voyage spanning December 2022 and January 2023, the Sagamore traveled from Genova, Italy, stopped in Algeciras, Spain, and unloaded in Houston, Texas. For more information on the MV Sagamore and its role in ammunition transfers to Israel, read Mask Off Maersk's December 2024 report on "Ammunition Transfers from the U.S. Department of Defense to Israel through Spanish Naval Port".

Since the publication of the first report on 4 November 2024 and the denial of docking permission to two Maersk ships by Spanish authorities on 7 November 2024, Maersk has shifted away from transshipment in Algeciras. All transshipments from Israel to Lockheed Martin Aeronautics in Fort Worth since that shift have involved either one stop at Rotterdam or two stops—first at Tangier Med in Morocco, then at Rotterdam. These shipments occurred on three of the original five ships (NYSTED MAERSK, MAERSK NORFOLK, NEXOE MAERSK), but also on VUOKSI MAERSK and VAYENDA MAERSK. Shipments from Tangier Med to Rotterdam happened on SAN AUGUSTIN MAERSK, CAP SAN MALEAS, and MAERSK EL PALOMAR.

This analysis of wing container shipments revealed that the MAERSK DENVER was carrying one shipment with a J420 container destined for Italy when it was blocked from docking. The NYSTED MAERSK, which was redirected to the port of Tangier following the blocking, transported three shipments of J461/J462 containers to Israel.

Since the blocking of these ships, one shipment of wing containers to Israel was routed through Tangier on the NYSTED MAERSK and four shipments were transshipped through Rotterdam on the JOHANNES MAERSK and MAERSK IZMIR. Additionally, the three shipments of containers to Israel were transshipped through the Port of Tangier on the MAERSK CALABAR and PHOENIX J.

On 9 January 2025, Maersk announced a shift in its MECL line between the India, Middle East, and Asia region (IMEA) and North America, replacing the Mediterranean port of call from Algeciras to Tangier, effective 24 February 2025.⁷⁸ This shift was ostensibly to improve transit times and was reported as a measure to avoid new costs from the European Union's new Emissions Trading Scheme (EU ETS),⁷⁹ which Maersk responded to by assessing their "emission surcharge" to customers and encouraging their "ECO Delivery Ocean" product.⁸⁰

^{78 &}quot;MECL Service Change", Maersk (2025) (Archived).

^{79 &}quot;New EU emissions regulations 'force' Maersk to dispense with port call in Algeciras port", Atalayar (2025) (Archived).

^{80 &}quot;Navigating the EU ETS and Fuel EU Maritime Regulations: What You Need to Know for 2025", Maersk (2024) (Archived).

However, the shipping trends discussed in this section reveal that the shift unofficially went into effect immediately after Spain's blocking of the Maersk Denver and Maersk Seletar, following the release of the first Mask Off Maersk report.

Conclusion

This report presents undeniable evidence that Maersk is not just a passive transporter of goods, but a key enabler of Israel's military-industrial complex. While previous reports highlighted Maersk's role in the transfer of weapons and settlement exports, this report exposes yet another dimension of Maersk's complicity— that it serves as the critical maritime link transporting military components used to manufacture, repair, and maintain fighter jets sustaining Israel's assault on Gaza and other Palestinian territories.

The report's findings demonstrate that Maersk is responsible for transporting components essential to the critical functions of the F-35, such as starting the engine, storing fuel, refueling mid-flight (enabling transatlantic deliveries to Israel), flying the plane, landing the plane, emergency-landing the plane, navigating in flight, communicating with other planes, opening the gun door, loading the bombs, and dropping the bombs.

Wings shipped by Maersk account for at least 49.5% of the wings for the 611 F-35s delivered between 2020 and 2024, 18 of which were F-35ls.81 Northrop Grumman's Palmdale facility—the primary production site for the F-35's center fuselage, which houses its engine, fuel tank, and internal bomb storage—largely relies on Maersk for the transportation of its F-35 parts.

The Lockheed Martin factory in Fort Worth, Texas, is set to produce and deliver five F-35ls to Israel between now and 2028, followed by an additional 25 under a new agreement starting in 2028. Maersk will be responsible for transporting the wings and other critical components for these aircraft, continuing its role in sustaining the F-35l supply to Israel for the foreseeable future.⁸²

While Maersk shipments of F-35 components continued, Israel received three F-35s mid-March 2025 and announced their arrival on March 16th,⁸³ two days before Israeli F-35s⁸⁴ launched coordinated airstrikes across Gaza, killing more than 400 Palestinians

81 Based on this report's limited data, which was initially obscured by freight forwarders, Maersk shipped at least 180 shipments of wing pairs and 123 shipments of completed-wing sets, enough for 303 jets. Various sources from 2020, 2021, 2022, 2023, and 2024 detail the annual deliveries of the F-35. From 2020 to 2024, 611 F-35s have been delivered across all variants. A number of reports and articles refer to 39 as the number of Israeli F-35's delivered and in service in 2024, prior to the March 2025 shipment of 3 F-35s: 1, 2, 3, 4, 5. Of these, 21 came from Lots 8–11 (2 from Lot 8, 7 from Lot 9, 6 from Lot 10, and 6 from Lot 11), based on a report by Ploughshares. Since 2019, deliveries came from Lot 11; the number of F-35Is delivered to Israel from 2020 to 2024 can be calculated by subtracting the 18 deliveries during and before 2019 that came from Lots 8 through 11 from the 39 received by 2024, leaving 18 deliveries in this time frame. Considering that the C-variant of the F-35 uses different, larger wings, Maersk's wing shipments account for at least 49.5% of total F-35 wings and an even larger share of the type of wings used on the F-35I.

82 The <u>recent delivery</u> of 3 F-35s increased the Israeli Air Force's F-35 fleet to 42. Israel has officially <u>ordered</u> 75 F-35's, ordering 50 total before 2024, and ordering another batch of 25 in June 2024.

83 "Three "Adir" (F-35I) fighter jets, manufactured by @LockheedMartin, landed last week at Nevatim Airbase", Israeli Air Force (2025)

84 Journalist Abubaker Abed reported in a post on X that F-35s and F-16s filled the skies the night of the airstrikes.

and ending the established ceasefire.⁸⁵ At the same time as this report's publication, F-35s are being produced for Israel, and Maersk has signed on to be the crucial link for the transportation of parts that will further augment the genocidal Israeli army's arsenal.

The report further highlights how Maersk proactively shifted the wing skin supply chain as a result of the first Mask Off Maersk report published in November 2024. It is evident that Maersk attempted to frame this shift as a response to the European Union's Emissions Trading Scheme (EU ETS) tariffs, while likely driven by the campaign's first report and the subsequent blocking of Maersk's ships.

Taking a positive step forward, the Spanish government announced it would seize any suspected Israeli military cargo—putting Maersk on high alert and signaling that the F-35 supply chain is no longer safe in the presence of people and nations of conscience.

Nonetheless, port complicity continues, with military transshipments left unaddressed from Italy, Morocco, and Egypt, enabling the shipment of components that are necessary for sustaining the genocide and occupation. It is up to governments, activists, and civil society to confront Maersk and this supply chain and demand an end to corporate complicity in the Israeli occupation and genocide of the Palestinian people.

^{85 &}quot;At least 404 killed as Israel unleashes strikes on Gaza, breaking ceasefire", Al Jazeera (2025)

Appendix A: F-35 Tire Contracts

According to Airframer's aircraft program directory, the F-35 program has three tire suppliers. The descriptions for these suppliers show that Dunlop Aircraft Tyres Ltd produces "Tyres: Radial main tyres (F-35B)", Michelin Aircraft Tire Corporation produces "Tyres: Tyres for CTOL/STOVL nose landing gear and CTOL main landing gear," and Goodyear Tire & Rubber Company produces "Tyres:," with no specification of the particular type.

An analysis of subcontracts under the F-35 Joint Strike Fighter program (Department of Defense contract code 198) shows that Michelin, Goodyear, and Dunlop have each supplied tires through various subcontracts.

Michelin has held 16 subcontracts for tires for the F-35 since 2013. The descriptions of these contracts are "CTOL MAIN TIRE CTOL/STOVL NOSE TIRE" (6533660392, 6534880048, 6535286918, 6535590825, 6535949648, 6537944203, 6538972805, 6539096614), "CTOL/STOVL NOSE TIRE CTOL MAIN TIRE" (6535151985), "STOVL MLG TIRE" (6535695687, 6536116653), "CTOL MAIN TIRE" (6535286918, 6537944203), "CTOL/STOVL NOSE TIRE" (6535691844, 6538220446), and "STOVL MLG TIRE" (6538622759). 13 of the contracts contain tires, either main or nose, for the conventional take-off and landing (CTOL) F-35A variant.

Goodyear has held at least 17 subcontracts for tires for the F-35 since 2019. The descriptions for these contracts are "MLG TIRE CV" (6535020475, 6535154461, 6535343443, 6535675683, 6535960183), "NOSE TIRE CV" (6535231304, 6535678532, 6538665448, 6535762676, 6535977707), "STOVL MLG TIRE" (6535695668, 6536115459, 6537570268), "MLG TIRE CV NOSE TIRE CV STOVL MLG TIRE" (6537570268, 6537775431), "MLG TIRE CV NOSE TIRE CV TIRE MLG 35X11.5-17" (6537775431), "GOODYEAR CV MLG TIRE WEAR IMPROVEMENT" (6574037422). All of these contracts are for STOVL and CV variants, which correspond to the B and C variants, respectively.

Dunlop has held at least seven subcontracts for tires for the F-35 since 2019. The descriptions for these contracts are "TIRE MAIN WHEEL" (6534807147, 6534952916, 6535305057, 6535852529, 6535852529, 6536293763) and "STOVL MLG TIRE" (6535695175). Although only one of these contracts specifies the variant as the STOVL, it is reasonable to infer that all of them are STOVL variants based on Airframer's program description and the fact that the STOVL tires are uniquely designed by Dunlop to withstand additional pressure from the short takeoff. Therefore, Dunlop tires are unlikely to be used for the F-35A.

Based on this information, Michelin appears to be the sole, or at the very least, primary supplier of tires for the F-35A.

^{1 &}quot;Lockheed Martin F-35 Lightning II - program supplier guide", Airframer.

^{2 &}quot;<u>5th-Generation Fighter, 1st-Generation Tires?</u>", Military.com (2013).

Appendix B: Imports to Northrop Grumman in Palmdale, California

As shown in the section highlighted blue in **Figure B1**, Northrop Grumman, Palmdale, produces the jet up to step J300, before sending this subassembly to Fort Worth, Texas.

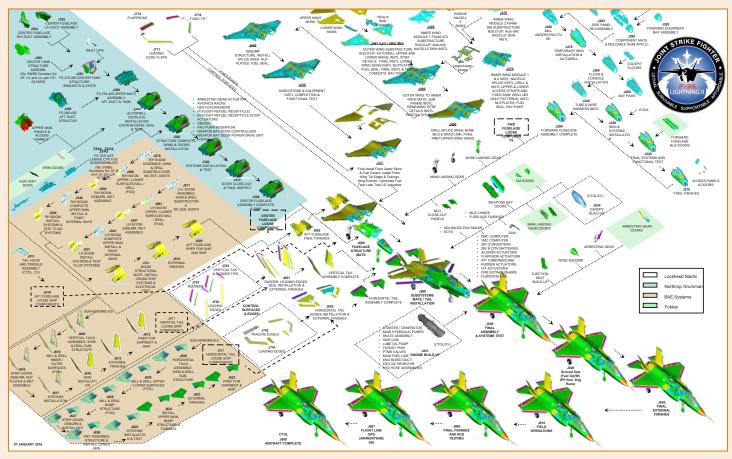


Figure B1. F-35A Assembly Flow Diagram.¹

Skin Assemblies

Many shipments included "SKIN ASSY" in the product description. Some entries specified "LH" or "RH" for left-hand or right-hand, while others included "UPPER," "LWR" (lower), "FWD" (forward), or "STRAP." These skins and panels are likely produced by Terma, a Danish company that has a contract with Northrop Grumman for the center fuselage that covers "production of composite structures, including doors, panels, skin assembly, and straps for all three aircraft variants." Center fuselage panels for the F-35 are also produced by Stelia North America, previously known as Composites Atlantic, in Nova Scotia, Canada.³

^{1 &}quot;Joint Strike Fighter F-35 IUID Program Implementation", Lockheed Martin Aeronautics (2011), p. 7 (Archived).

^{2 &}quot;TERMA AND F-35", Terma.

^{3 &}quot;Products", Stelia North America.

Fueling Components

Listings that described "IFRR DOOR ASSY" and "TANK ASSEMBLY - FS 270 TO 346.5" were confirmed to be relevant to the F-35. IFRR refers to the F-35's In-Flight-Refuel-Receptacle. This system contains a left and a right panel, congruent with the descriptions in the shipping data, and it is visually part of the center fuselage assembly. We believe these panels are made by Quickstep Holdings, an aerospace company based in Australia. Quickstep is Northrop Grumman's largest Australian supplier for the F-35 program,4 and provides support for all three variants. They supply "lower side skins, maintenance access panels, the F2 fuel tank cover and the lower skin and in-board weapons bay doors".6 Terms like "F2 FUEL ACCESS" and "PANEL ASSY. F2 FUEL" were also prevalent in the bills of lading analyzed.



Figure B2. The F-35's IFRR, Left and Right Panels Open.7

Integrated Power Package - IPP ASSY

Another item from Maersk's shipments to Northrop Grumman include "IPP ASSY A-6". The IPP, or Integrated Power Package, is a subsystem of the PTMS, Power & Thermal Management System. It can be located on the left side of the airplane, as shown in **Figure B3.**

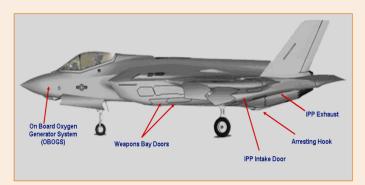


Figure B3. F-35 Diagram Showing IPP Intake and Exhaust.8



Figure B4. IPP Turbomachine.9

^{4 &}quot;Northrop Grumman Taps Quickstep for Australian-made Components to Support F-35 Program", Northrop Grumman (2022).

^{5 &}quot;Northrop Grumman signs supply deal with Quickstep", Asia Pacific Defence Reporter (2022).

^{6 &}quot;Aerospace supplier cuts time and cost of delivering composite parts for the Joint Strike Fighter", Siemens Software.

^{7 &}quot;U.S. Air Force F-35A Lightning II aircraft assigned to the 58th Fighter Squadron, 33rd Fighter Wing moves into position to receive fuel from a KC-135 Stratotanker assigned to the 336th Air Refueling Squadron 130516-F-XL333-551.jpg", Wikimedia Commons (2013).

^{8 &}quot;Emergency Responder Familiarization Training F-35 LIGHTNING II", David Schultz Airshows (2010).

^{9 &}quot;Honeywell Cooling Technology Will Enable Next Generation Of F-35", Honeywell (2024).

Quickstep also provides the flare housings as part of the J300 center fuselage assembly. The company has partnered with Chemring Australia to produce MJU-68 flares,¹⁰ which are made specifically for the F-35.¹¹



Figure B5. F-35 Firing a Flare.¹²

Fuselage Station Numbers

Many of the descriptions contained "FS" or Fuselage Station numbers. These describe different sections of any given plane. For example, Maersk had shipments with the description, "TANK ASSEMBLY - FS 270 TO 346.5", which allowed us to identify where on the F-35 this tank assembly might be when comparing the F-35A Assembly Flow Diagram against the FS Chart of the F-35A, shown below. This description from Maersk's bills of lading matches these two diagrams as well as a presentation on the F-35 fuel tanks.¹³

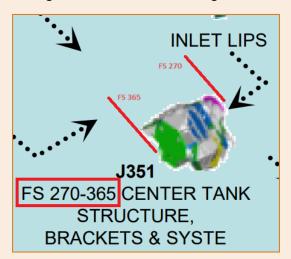


Figure B6. **Zoom in of F-35A Assembly Flow Diagram.**



Figure B7. FS Chart of the F-35A.14

Overall, the center fuselage of the F-35A ranges from FS 270 to FS 425. All descriptions with FS numbers in this range were considered. While the IFRR panels, the center tank, and the majority of the skin assemblies were clearly identifiable, some components were assessed as probable rather than definitive. Another listing contained "AMSTERDAM, NETHERLANDS GOODS DESCRIPTION: LWR ASSY, LH - FS319 TO 425." While "lower assembly" is too general to derive a part from, this region on the lower side of the F-35 points to the main

- 10 "Quickstep opens advanced manufacturing facility for composite flare housings", JEC Composites (2019).
- 11 "Exhibit P-40, Budget Line Item Justification: PB 2020 Air Force", Air Force (2019).
- 12 "Moment Flare Released From F-35 Captured In Remarkable Photo", The War Zone (2023).
- 13 "Joint Strike Fighter Program Update", F-35 Lightning II Program Office (Archived).
- 14 This chart is an annotated version of the image "F-35A Top Profile."

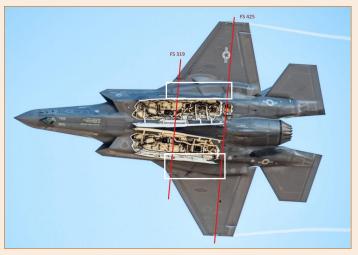


Figure B8. Main Landing Gear and Drag Brace Panels, Located Around FS 319 to FS 425.¹⁵

landing gear close out panels, produced by Kongsberg Defense of Norway.

This is further supported by other listings containing the description "DRAG BRACE DOOR ASSY". Drag braces are linkage arms that support the main shock columns in landing gear. The F-35 drag brace is shown in **Figure B9** below, attached to the panel door that begins at FS 319.



Figure B9. F-35 Drag Brace, Shown as a White Piston-Cylinder.¹⁶

The Norwegian government owns 50.004% of Kongsberg Defense.¹⁷ Alongside the main landing gear panels, Kongsberg also supplies the leading edges and rudders of the tails, as well as air-to-air missile pylons in collaboration with Marvin Engineering, based out of the U.S. All of these parts are used across all variants of the F-35, including the A variant used by Israel. Active contracts show that Kongsberg is currently manufacturing these components for lots from which the U.S. government is specifically sourcing shipments to Israel, including Lot 15.¹⁸

Patria Aerostructures, a Finnish company, recently built a new facility in Jämsä Halli to produce the entire forward fuselage of the F-35 in partnership with Lockheed Martin of Fort Worth, Texas. They are also set to build, maintain, and repair the Pratt & Whitney F135

^{15 &}quot;Iran's Claim of Hitting Israeli F-35s: A Closer Look at Nevatim Airbase Strike", Alpha Defense (2024).

¹⁶ This image is an annotated version of an F-35 wallpaper, found on alphacoders.com.

^{17 &}quot;Corporate structure and shareholder voting rights", Patria Group.

^{18 &}quot;KONGSBERG secures NOK 1.2 billion order for deliveries to F-35 Joint Strike Fighters", Kongsberg (2023).

engines in Linnavuori.¹⁹ Kongsberg Defense owns 49.9% of Patria Aerostructures,²⁰ making the Norwegian government complicit in these ongoing activities as well, despite their official restrictions on arms exports to Israel. These restrictions are effectively bypassed, as the components are sold to Lockheed Martin as subassemblies before being installed and sold to Israel as whole assemblies.

Activists in Norway have demanded end-user declarations to be enacted with the sale of weapons.²¹ This is easily achievable as each F-35 is serialized, has a specific country code, and is assigned to specific lots. The subassemblies and parts of each plane are also subjected to non-uniform repair and replacement, all of which must be logged and documented. Due to the Joint Strike Fighter program requiring a global supply chain to maximize efficiency in production, maintenance, and repair, it must also have robust traceability.

Weapons Bay Doors and Gun Actuator Door

Bills of lading mentioned "DOOR ASSY, WBD" and "GUN/GAS ACTUATOR DOOR." WBD refers to the Weapons Bay Doors on multiple JSF documents, which are located on the bottom of the center fuselage, as shown in **Figure B3**. "GUN/GAS ACTUATOR DOOR" likely refers to either the gun vent door, shown to be installed on the center fuselage on step J345, or the mechanism for opening the weapons bay doors, powered by a gas actuator. As shown in **Figure B11**, the A variant of the F-35 is the only variant with an internal gun and hence the only variant with a gun door, while variants B and C use the General Dynamics GAU-22 gatling gun as an external podded gun. These shipments, therefore, appear to include the weapons bay doors and associated opening mechanisms.

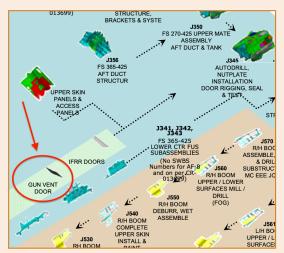


Figure B10. Gun Vent Door going to step J345 in F-35A Assembly Flow Diagram.

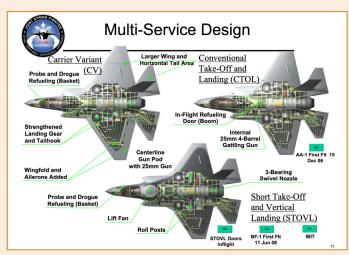


Figure B11. Diagrams of different variants showing internal gun only on A variant.²²

^{19 &}quot;Patria to join the global supply chain of F-35s", Patria Group (2024).

^{20 &}quot;Corporate structure and shareholder voting rights", Patria Group.

^{21 &}quot;Anti-imperialists protest use of Norwegian weapons by Israel", Peoples Dispatch (2024).

^{22 &}quot;Joint Strike Fighter Program Update", F-35 Lightning II Program Office, p. 11 (Archived).

Air Inlet

One bill of lading from 1 August, 2020 included "PAINT INLET DUCT" in the product description. The air inlet ducts appear in steps J353 and J354 of the assembly flow diagram as part of the center fuselage. In 2010, Turkish Aerospace Industries, a secondary supplier of air inlet ducts and center fuselages to Northrop Grumman. produced air inlet ducts in Ankara, Turkey and delivered them to Northrop Grumman's F-35 assembly line in Palmdale, California.²³ While it is unclear where this specific shipment originated from, this past release shows the secondary role of international suppliers in supporting the production of air inlet ducts and center fuselages by Northrop Grumman, explaining why only one import was found. Additionally, the air inlet, also called the diverterless supersonic inlet (DSI), has "specialized high-temperature coatings on internal and external surfaces," explaining the inclusion of paint in the description.²⁴ Another bill of lading included "STOVL air inlet" in the product description, corresponding to the air inlet for the STOVL or B-variant of the F-35, shown in Figure B13.

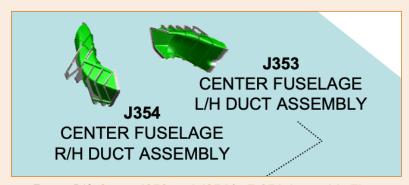


Figure B12. Steps J353 and J354 in F-35A Assembly Flow Diagram.

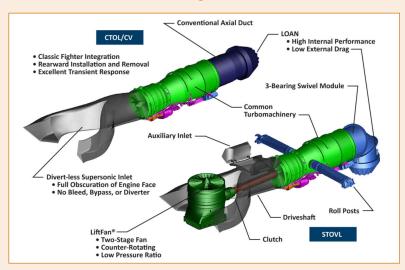


Figure B13. Air Inlets for all F-35 variants.²⁵



Figure B14. Air Inlets for all F-35 variants.²⁶

^{23 &}quot;<u>Key International Northrop Grumman F-35 Supplier Delivers First Large, Complex Composite Structure</u>", Northrop Grumman (2010) and "<u>Photo Release – Northrop Grumman Takes Delivery of First Production F-35 Air Inlet Duct From Key Turkish Supplier</u>", Globe Newswire (2011).

^{24 &}quot;F-35 Air Vehicle Technology Overview", Lockheed Martin (2018).

²⁵ ibid. p 23.

^{26 &}quot;Inventing the Joint Strike Fighter", Lockheed Martin Skunk Works (2010), p. 37.



Figure B15. Northrop Grumman employee inspecting air duct from TAI.²⁷

Figure B16. Composite Skin with SynCore center structure for F-35 inlet duct.²⁹

An additional bill of lading mentioned "SYNCORE DUCT." A photo released by the Air Force (Figure B16) showed a "thingage composite skin with a SynCore™ center structure, subjected to acoustic and impact testing, for use on the F-35 Joint Strike Fighter inlet duct." Based on this, the shipment likely refers to a SynCore-manufactured composite skin intended for the F-35's inlet duct.

Avionics Bay

Bills of lading mentioned "AVIONICS BAY DOOR ASSY." Northrop Grumman produces the Communications, Navigation and Identification System (CNI) for the F-35, which they describe as "one of the most advanced integrated avionics systems ever engineered" with more than 27 functions in its integrated suite. 30 Avionics racks are added to the center fuselage between steps J330 and J320, as shown in **Figure B17**.

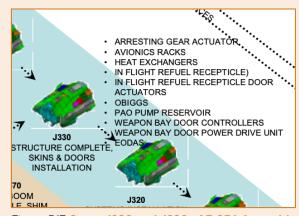


Figure B17. Steps J330 and J320 of F-35A Assembly Flow Diagram.

^{27 &}quot;Photo Release - Northrop Grumman Takes Delivery of First Production F-35 Air Inlet Duct From Key Turkish Supplier", Globe Newswire (2011).

^{28 &}quot;A thin-gage composite skin with a SynCore™ center structure, subjected to acoustic and impact testing, for use on the F-35 <u>Joint Strike Fighter inlet duct</u>", Air Force Medical Service.

^{30 &}quot;F-35 Lightning II Program", Northrop Grumman (2023).

Arresting Hook Assembly

Bills of lading mentioned "ARRESTING HOOK ASSEMBLY." An arresting hook, or tail hook, is used by an aircraft to quickly accelerate it for landings on aircraft carriers or emergency landings. It is common on the C variant, which is designed for aircraft carriers, but also the A variant, as revealed by previous tailhook testing by the U.S. Air Force. The F-35A Assembly Flow Diagram shows Tail Hook and Tressle Assembly for the CTOL and CV variants, corresponding to A and C respectively, in step J511 created by BAE systems, which appears to join the center fuselage in step J860. Additionally, the arresting gear actuator is attached to the center fuselage between steps J330 and J320. These details indicate that the arresting hook system is part of the F-35A's center fuselage structure.



Figure B18. Steps J511 of F-35A
Assembly Flow Diagram.

ICC-PDC

Bills of lading mentioned "PANEL ASSY - ICC-PDC." ICC refers to "inverter/converter/controller," an electrical component part of the engineer starter/generator (ESG) system.³² PDC refers to Power Device Corporation, which produces components for the F-35.³³ A list of F-35 upgrades mentions "PDC Lightning Compliance" and "AESG ICC System Growth" as priorities for F-35A upgrades.³⁴ Additionally, F-35 durability test findings show the ICC/PDC floor located in the center of the aircraft on the F-35 C variant, as shown in **Figure B19**. Nevertheless, the ICC/PDC is a part common to all variants, and its position in the center fuselage is consistent with its proximity to the engine.

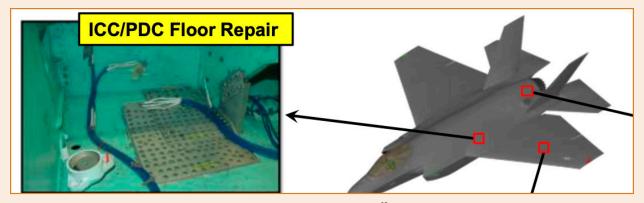


Figure B19. CV Test Findings.35

^{31 &}quot;The F-35A has started tailhook testing at Edwards AFB", The Aviationist (2016).

^{32 &}quot;F-35 Air Vehicle Technology Overview", Lockheed Martin (2018).

^{33 &}quot;Aerospace", Power Device Corporation.

^{34 &}quot;Exhibit P-40, Budget Line Item Justification: PB 2015 Air Force", Air Force (2014).

^{35 &}quot;Overview of The Full Scale Durability Tests On F-35 Lightning II Program", Lockheed Martin (2014), p. 18.

Auxiliary Air Inlet

Bills of lading mention "AAI SIDE PANEL ASSY" and "SKIN ASSY AAI AFT" in the product description. AAI stands for Auxiliary Air Inlet, which feeds additional air into the lift fan for the F-35B. Two panels sit on the top of the center fuselage and open to each side, as shown in **Figure B13**. These shipments thus contain the panel and the skin for the panel, respectively.

Shroud Fairing for Lift Fan Tunnel

Bills of lading mention "SHROUD FAIRING - LIFT FAN TUNNEL," which refers to the panel that opens and closes above the lift fan when in use (see **Figure B20**). The term shroud in aviation refers to a part that hides another (in this case, the fan), and a fairing is a structural component on the exterior of an aircraft that provides a smooth service and reduces drag. Another bill of lading refers to the "FINAL ASSY, LFI DOOR." LFI stands for Lift Fan Inlet or Lift Fan Intake. Given these details, this shipment refers to the door for lift fan inlet, meaning it refers to an assembly that is part of the Shroud Fairing.



Figure B20. Lift Fan Shroud Fairing.36

Lift Fan Exhaust Door

One bill of lading mentions "FINAL ASSY, LFE DOOR" in product description, where LFE refers to Lift Fan Exhaust. This shipment refers to the doors on the bottom side of the F-35 for the lift fan exhaust, shown in the open position in **Figure B21**.

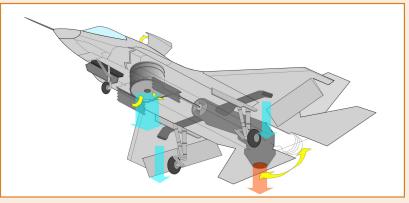


Figure B20. Lift Fan Shroud Fairing.³⁷

^{36 &}quot;AEC's F-35 Program: Pioneering Aerospace Engineering", Albany Engineering Composites. This image has been annotated by the research team.

^{37 &}quot;F-35B Joint Strike Fighter (thrust vectoring nozzle and lift fan)", Wikimedia Commons (2008).

Unidentifiable Parts

Certain parts, as mentioned at the top of this appendix, can not be directed tied to the production of the F-35. However, based on an analysis of suppliers for the other aircrafts produced at the facility (see **Appendix C**), these parts can be reasonably assumed to belong to the F-35 program. These include shipments labeled "LWR INSTL, CENTER", "LWR ASSY", "FWD DOOR ASSY", and "CONTL UNIT, ISOLAT." "LWR INSTL, CENTER" likely refers to an installation on the lower side of the aircraft in the center, while "LWR ASSY" appears to be an unspecified assembly for the lower section of the aircraft. "FWD DOOR ASSY" likely refers to any "forward door assembly," possibly referring to landing gear or weapons bay doors located in the F-35's center fuselage. "CONTL UNIT, ISOLAT" likely refers to isolation for a control unit, isolating electrical components for a specific system. This component would be consistent with the avionics systems and other systems made by Northrop for the F-35 center fuselage. Given the lack of international suppliers for other aircraft types at this facility, it is reasonable to assume that these generically labeled components are intended for the F-35.

Appendix C: Programs within Northrop Grumman, Palmdale, California

One page of Northrop Grumman's website lists the flagship programs in Palmdale as the F-35 Center Fuselage Integrated Assembly Line (IAL), B-2 Stealth Bomber, Global Hawk Enterprise,¹ while another lists F-35 Center Fuselage Integrated Assembly Line (IAL), B-21 Stealth Bomber and Global Hawk Enterprise.² This difference reflects the fact that the B-2 is being retired and replaced by the more modern B-21,³ which has been recently used to attack Yemen.⁴ Following the maiden flight of the first B-21A prototype in November 2023, Northrop Grumman indicated that at least 5 aircraft are in final assembly at its Palmdale, California, facility without disclosing an official delivery schedule. Still, in May 2024, the U.S. Department of Defense awarded the Palmdale facility a \$7,000,000,000 indefinite-delivery contract for B-2 modernization and sustainment.

Northrop, Boeing, LTV (Vought), Hughes, and General Electric developed the B-2 bomber under secrecy under the program "Tacit Blue," which was considered 'critical to national security' and was declassified in 1996.⁵ These companies produced major structural sections, components and systems in facilities across the U.S. and then shipped them to the USAF Plant 42 in Palmdale, California.⁶ Given that the plane was designed in a classified government program with domestic suppliers, it is unlikely that any international suppliers exist or that Northrop would import any parts for the plane.

Northrop Grumman's partners on the B-21 program include Pratt & Whitney in East Hartford, Connecticut, Janicki Industries in Sedro-Woolley, Washington, Collins Aerospace in Cedar Rapids, Iowa, GKN Aerospace in St. Louis, Missouri, BAE Systems in Nashua, New Hampshire and Spirit Aerosystems (acquired by Boeing in 2024)⁷ in Wichita, Kansas.⁸ Given that all of these suppliers are domestic to the U.S., it is unlikely that any imports to the Palmdale facility go to the B-21 program.

The Northrop Grumman RQ-4 Global Hawk is a surveillance drone supported by a network of international suppliers. While Palmdale, California, served as the site for test flights of specific configurations, including the 2021 flight of the first Japanese RQ-4B, government contracts reveal that Northrop Grumman's San Diego facility is responsible for the "development, modernization, retrofit and sustainment activities for all Air Force Global Hawk variants." 12

Based on this information, it is highly unlikely that any of Northrop Grumman Palmdale's imports contain parts for any aircrafts other than the F-35, which has a uniquely international supply chain.

- 1 "Northrop Grumman in Palmdale, California", Northrop Grumman.
- 2 "Return to Palmdale", Northrop Grumman.
- 3 "USAF to Retire B-1, B-2 in Early 2030s as B-21 Comes On-Line", Air & Space Forces Magazine (2018).
- 4 "US says B-2 bombers attacked Houthi targets in Yemen", Al Jazeera (2024).
- 5 "PJ Critical to National Security", Air Force Office of Special Investigations (2020).
- 6 "b-2", Vought.
- 7 "Boeing to become supplier on B-21, V-280 after \$8.3 billion acquisition of Spirit AeroSystems", Breaking Defense (2024).
- 8 "B-21 Raider", Air Force and "Pratt Is Making B-21 Engines; Don't Expect More Tech Info", Breaking Defense (2016).
- 9 "Northrop Grumman RQ-4 Global Hawk", Air Framer.
- 10 "Next-Gen Global Hawk Unmanned Aircraft Takes Flight", Defense Talk (2009).
- 11 "Northrop Grumman successfully completes first flight of RQ-4B Global Hawk for Japan", Army Recognition (2021).
- 12 "Contracts For Nov. 25, 2020", U.S. Department of Defense (2020).

Appendix D: Canadian Companies Contributing to the F-35 Program

Although this appendix does not document F-35 shipments from Canadian companies via Maersk specifically, it is essential to understanding the global production network that Maersk facilitates. Canadian companies manufacture critical components for F-35s being built, including those delivered to Israel, and these components integrate directly with systems shipped by Maersk to Lockheed Martin and Northrop Grumman. The decentralized nature of this supply chain, paired with export loopholes and opaque shipping documentation, conceals Canada's active role in sustaining Israel's air war in Gaza through the F-35 program.

Canada is one of the most entrenched yet underacknowledged international contributors to the F-35 supply chain. While often portrayed as a neutral or peace-promoting country, Canada is, in fact, positioned as a critical node in the global war machine that enables atrocities such as those unfolding in Gaza. Canadian aerospace and defense companies provide essential components used in every F-35 aircraft, including those deployed by Israel.

What follows is a breakdown of Canada's industrial involvement and economic incentives driving it, as well as an examination of the logistical infrastructure and export loopholes that allow Canadian complicity to remain obscured from public scrutiny. Canada has been a partner in the F-35 program since 1997, with Canadian aerospace companies producing critical components that are shipped to the U.S. for final assembly. This decentralized and transnational production model—coupled with Canada's permissive export laws—has created an opaque supply chain where the full scope of Canada's complicity in the machinery of war remains concealed.

Canada's Economic Incentives in the F-35 Program

The F-35 program has resulted in significant financial benefits for Canada, generating billions of dollars in contracts for Canadian companies and sustaining thousands of jobs across the country. From 2007-2019, the program generated over \$2.4 billion CAD in contracts for Canadian companies, contributing over \$2.1 billion to Canada's GDP.¹ Reports also indicate that every F-35 contains approximately \$2.3 million worth of Canadian-made components.²

Canadian companies participate in the F-35 program through a structured system of industrial partnerships, competitive bidding, and government-mandated offsets under Canada's Industrial and Technological Benefits (ITB) policy.³ As a level 3 partner in the Joint Strike Fighter program, Canada enables its aerospace firms to compete for contracts

^{1 &}quot;F-35 Program in Canada", Lockheed Martin (2020).

^{2 &}quot;US\$2.3 million worth of Canadian components in every Lockheed Martin F-35 fighter jet", Peace Brigades International-Canada (2023).

^{3 &}quot;Canadian Industrial Participation in the F-35 Joint Strike Fighter Jet program", Government of Canada (2012).

within the F-35 supply chain. Major defense contractors like Lockheed Martin and Pratt & Whitney subcontract work to Canadian companies. As of November 2024, over 110 Canadian companies have secured contracts to support the development, production, and sustainment of F-35 fighter jets, through a combination of direct subcontracting, competitive bidding for supplier roles, and government-facilitated initiatives. These standardized components are incorporated into all allied aircraft, including Israel's customized F-35Is, through the program's common supply chain.⁴

Export Laws in Canada and the Role of Private Logistics Companies

By providing essential components for the F-35, Canadian companies are directly contributing to the aircraft's capabilities, including its weapons systems. The components supplied by Canadian companies are integral to the aircraft's overall functionality, structural integrity, and engine performance and help carry out critical functions like landing the plane, gathering intelligence for attacks, and cooling the engine.

While Canada has suspended some arms export permits to the Israeli military, loopholes still exist due to a lack of logistical transparency. Over half of Canadian arms exports are destined for the United States, including key F-35 components. For example, Héroux-Devtek designs, develops and manufactures landing gear systems for the F-35 which are crucial for the aircraft's takeoff and landing. These parts are subsequently sent to a Lockheed Facility in Fort Worth, Texas to be assembled in the lethal fighter jet. Canada does not disclose what specific weapons or components are being exported or how they are routed, making oversight almost impossible. On the other hand, U.S. laws on the International Traffic in Arms Regulations (ITAR) provide license exemptions for Canadian imports, exports, and reexports of 'defense articles' under section 22 CFR 126.5. Logistics companies provide essential transport for military equipment, creating a hidden network for the arms trade. The lack of transparency in Canadian arms exports, combined with the use of private logistics firms and freight forwarders, allows Canadian arms to continue fueling genocide, despite public claims of an arms embargo.

Integration with Maersk's Supply Chain

As noted in the main body of this report, several of the components shipped by Maersk to Northrop Grumman in Palmdale, California, integrate with parts manufactured by Canadian suppliers. Bulkheads from ASCO Aerospace Canada Ltd. serve as the structural core for the center fuselage, into which Maersk-shipped skins and panels are installed. Stelia Aerospace's shims are used in the operation of Maersk-shipped weapons bay doors, while the Integrated Power Package, also shipped by Maersk, relies on subsystems produced by Honeywell in Mississauga. Although Canadian shipments often move through separate logistics channels like FedEx, the integration of these components with Maersk-facilitated systems at key production hubs shows how Canada's role in the F-35 program is embedded in the same global supply chain.

^{4 &}quot;Fanning the Flames: the Grave Risk of Canada's arms exports to Israel", Ploughshares (2024).

⁵ ibid.

^{6 &}quot;22 CFR 126.5 - Canadian exemptions.", Code of Federal Regulations.

Canadian Companies Contributing to the F-35 Program

While this section does not document direct shipments by Maersk from Canadian suppliers, it demonstrates how Canadian-made components are embedded in the F-35 supply chain more broadly, overlapping with the same network that Maersk facilitates. From fuselage structures to thermal control systems, Canadian parts integrate with components shipped by Maersk to key F-35 assembly sites like Palmdale and Fort Worth. This underscores Canada's active role in sustaining the fighter jet program through a broader web of complicity—one that extends beyond shippers to include the international producers, contractors, and states that enable Israel's military operations.

- Magellan Aerospace (Winnipeg, MB): A major contributor, Magellan Aerospace manufactures horizontal tail assemblies, crucial for the aircraft's stability and control during flight. They also produce vane boxes, structural components within the tail assembly, and transition ducts, which are part of the aircraft's engine system.⁷
- L3Harris MAS (Mirabel, QC): This company is involved in long-term maintenance, repair, overhaul, and upgrade facilities for the F-35, ensuring the continued operational effectiveness of the jets.⁸
- Avcorp Industries (Delta, BC): Avcorp produces folding outboard wing assemblies for the F-35C variant. These assemblies are a key feature designed for aircraft carrier operations, allowing the aircraft to occupy less space on a carrier.⁹
- Asco Aerospace Canada Ltd. (Delta, BC): This company manufactures components such as bulkheads, which are structural elements that provide critical strength and support within the aircraft's fuselage.¹⁰
- **Héroux-Devtek** (Longueuil, QC): Héroux-Devtek designs, develops, manufactures, and repairs landing gear systems for the F-35. These systems are essential for the aircraft's takeoff and landing. This also includes the uplock systems, which hold the aircraft landing gear when in flight, Devtek currently produces this part for all variants of the F-35. They are also contracted to assemble aluminum boxes for the complex Power Thermal Management System (PTMS) developed and produced by Honeywell Aerospace in Toronto.¹¹
- **GasTOPS Limited** (Ottawa, ON): This company develops oil debris monitoring sensors, crucial for the F-35's engine health management, detecting minute particles in the oil, which can indicate potential engine problems.¹²

^{7 &}quot;Winnipeg plant one of the largest F-35 producers in Canada", Canadian Dimension (2024).

^{8 &}quot;Government of Canada announces strategic partner for its CF-35A fighter jet airframe maintenance depot", Government of Canada (2024).

^{9 &}quot;Avcorp Awarded F-35 contracts by BAE Systems", Canadian Defense Review (2020).

^{10 &}quot;Lockheed Martin recognizes Canadian suppliers for F-35 Lightning II", Skies Mag (2013).

¹¹ ibid.

^{12 &}quot;Canadian Industrial Participation in the F-35 Joint Strike Fighter Jet program", Government of Canada (2012).

- **Honeywell** (Various locations): Honeywell provides Power Thermal Management System controllers, which regulate the aircraft's thermal systems, essential for maintaining optimal performance of its electronics and other systems.¹³
- Stelia Aerospace (Lunenburg, NS): This company builds shims for weapons bay doors, components that ensure precise fit and alignment of the doors that enclose the aircraft's weapons.¹⁴
- Howmet Aluminum (Laval, QC): Manufactures critical F-35 components, including single-piece forged aluminum and titanium bulkheads, nickel-based superalloy turbine blades, and vibration-resistant fasteners. Utilizing casting, hot isostatic pressing, and optical metrology, ensuring structural integrity, thermal resistance, and dimensional accuracy across airframe and propulsion systems.¹⁵
- Centra Industries (Cambridge, ON): Centra Industries supplies forward and centre fuselage machined components.¹⁶
- Apex industries (Moncton, NB): This company manufactures structural and support
 components for the F-35 program, including chines, mid-fairing supports, intercostal
 brackets, and wing box fittings. The company also supplies assembly brackets,
 equipment bay shelves, and refurbished tubing for run stations. These parts contribute
 to airframe integration and subsystem mounting. 17
- **Goodrich Manufacturing** (Oakville, ON): Produces component assemblies for the F-35's main and nose landing gear while also providing documentation and technical guidance. The landing gear is one of the most critical components of the aircraft, without which it cannot operate.¹⁸

^{13 &}quot;Powering The F-35 With A Symphony Of Systems", Honeywell.

^{14 &}quot;US\$2.3 million worth of Canadian components in every Lockheed Martin F-35 fighter jet", Peace Brigades International-Canada (2023).

^{15 &}quot;Howmet Aerospace innovation helps the F-35 Joint Strike Fighter soar", Howmet Aerospace.

^{16 &}quot;Canadian Industrial Participation in the F-35 Joint Strike Fighter Jet program", Government of Canada (2012).

^{17 &}quot;Canadian Industry Takes Off With F-35 Lightning II", Cision (2013).

^{18 &}quot;Goodrich receives production contract for F-35 Lightning II weapons bay door drive system", Airframer (2013).

Appendix E: Complicit Routes and Vessels

This appendix compiles the routes and ships complicit in the shipment of F-35 components, as described in this report. Please note that dates for exports indicate departure from the U.S., while dates for imports indicate arrival in the U.S.

Summary of Exports from U.S.

Destination Country: Italy

1. Houston → Algeciras → Genova (54 total shipments)

Products: J420 CONTAINER (36), CENTER FUSELAGE (17), FULL WING (1)

First Ship	Second Ship
MAERSK ATLANTA (10), MAERSK KENSINGTON (8), MAERSK DETROIT (8), MAERSK SELETAR (6), MAERSK SENTOSA (5), MAERSK KINLOSS (4), MAERSK PITTSBURGH (4), MAERSK CHICAGO (3), MAERSK HARTFORD (3), MAERSK COLUMBUS (3), MAERSK DENVER (2)	MAERSK NUBA (16), MARTHA A (14), MAERSK NARMADA (12), TEOMAN A (11), MAERSK NAIROBI (2), MSC PINA (1)

These shipments departed from the U.S. between June 2023 and September 2024.

2. Houston → Genova (10 total shipments)

Products: J420 CONTAINER (7), CENTER FUSELAGE (3)

First Ship

MAERSK SELETAR (4), MAERSK COLUMBUS (3), MAERSK PITTSBURGH (2), MAERSK DENVER (1)

These shipments departed from the U.S. between June 2023 and September 2024.

3. Houston → Langreo → Genova (4 total shipments)

Products: CENTER FUSELAGE (2), FULL WING (2)

First Ship	Second Ship
MAERSK DETROIT (4)	MAERSK NUBA (3), MAERSK DETROIT (1)

These shipments departed from the U.S. between June 2024 and September 2024.

4. Houston → Tangier → Langreo → Genova (2 total shipments)

Products: CENTER FUSELAGE (1), J420 CONTAINER (1)

First Ship	Second Ship	Third Ship
MAERSK DETROIT (1), MAERSK	MAERSK GENOA (1), LEXA	TEOMAN A (1), MAERSK NARMADA
DENVER (1)	MAERSK (1)	(1)

This shipments departed the U.S. between October 2024 and December 2024. This route began after the Spanish government blocked the Maersk Denver from docking in November 2024, requiring it to re-route to Tangier.

5. Houston → Tangier → Vado Ligure → Langreo → Genova (2 total shipments)

Products: J420 CONTAINER (2)

First Ship	Second Ship	Third Ship	Fourth Ship
MAERSK HARTFORD (2)	TEOMAN A (2)	PHOENIX J (2)	MSC TORONTO (2)

These shipments departed from the U.S. on 2 November, 2024.

6. Houston → Algeciras → Tangier → Genova (2 total shipments)

Products: FULL WING (1), CENTER FUSELAGE (1)

First Ship	Second Ship	Third Ship
MAERSK COLUMBUS (2)	MAERSK PENANG (2)	MSC EVEREST VIII (2)

These shipments departed the U.S. on 20 May, 2023.

7. Houston → Tanger Med → Tangier → Genova (3 total shipments)

Products: CENTER FUSELAGE (2), J420 CONTAINER (1)

First Ship	Second Ship	Third Ship
MAERSK KENSINGTON (2),	MAERSK CALABAR (3)	MSC NIOVI VIII (1), MSC PINA (1),
MAERSK DETROIT (1)		TRAIGUEN (1)

These shipments departed the U.S. in December 2024.

8. Houston → Tangier → Algeciras → Genova (1 total shipments)

Products: CENTER FUSELAGE (1)

First Ship	Second Ship	Third Ship
MAERSK SELETAR (1)	CAP SAN VINCENT (1)	TEOMAN A (1)

This shipment departed the U.S. on October 28, 2024.

Destination Country: Israel

1. Houston → Algeciras → Haifa (34 total shipments)

Products: SHIPPING CONTAINERS (34)

First Ship	Second Ship
MAERSK DETROIT (5), MAERSK KARACHI (5), MAERSK KINLOSS (4), MAERSK SENTOSA (3), MAERSK KENSINGTON (3), MAERSK PITTSBURGH (3), MAERSK HARTFORD (3), MAERSK ATLANTA (3), MAERSK CHICAGO (2), MAERSK DENVER (2), MAERSK SELETAR (1)	NYSTED MAERSK (17), MAERSK NORFOLK (6), NEXOE MAERSK (5), MARIO A (3), WANDA A (3)

These shipments departed the U.S. between February 2022 and September 2022.

2. Houston → Port Said East → Haifa (21 total shipments)

Products: SHIPPING CONTAINERS (21)

First Ship	Second Ship
MAERSK KINLOSS (5), MAERSK DETROIT (5), MAERSK COLUMBUS (4), MAERSK PITTSBURGH (3), MAERSK KENSINGTON (2), MAERSK ATLANTA (2)	MAERSK DAKAR (19), WANDA A (1), MAERSK BENTONVILLE (1)

These shipments departed the U.S. between June 2023 and January 2024.

3. Houston → Haifa (12 total shipments)

Products: SHIPPING CONTAINERS (12)

First Ship

MAERSK CHICAGO (7), MAERSK SELETAR (2), MAERSK COLUMBUS (2), MAERSK DETROIT (1)

While the exact route is unknown, these shipments departed the U.S. between January 2020 and February 2023, listing only the first ships.

4. Houston → Rotterdam → Ashdod (4 total shipments)

Products: SHIPPING CONTAINERS (4)

First Ship	Second Ship
MAERSK MONTANA (2), MAERSK KANSAS (2)	JOHANNES MAERSK (2), MAERSK IZMIR (2)

These shipments departed the U.S. in December 2024. This route began after the Spanish government blocked Maersk ships from docking in November 2024.

5. Houston → Tangier → Haifa (4 total shipments)

Products: SHIPPING CONTAINERS (4)

First Ship	Second Ship
MAERSK DENVER (3), MAERSK KINLOSS (1)	NYSTED MAERSK (4)

These shipments departed the U.S. between October 2024 and November 2024. This route began after the Spanish government blocked the Maersk Denver from docking, requiring it to re–route to Tangier.

6. Houston → Port Said → Haifa (2 total shipments)

Products: SHIPPING CONTAINERS (2)

First Ship	Second Ship
MAERSK PITTSBURGH (2)	MAERSK BENTONVILLE (2)

These shipments departed the U.S. in December 2023.

6. New York → Haifa (2 total shipments)

Products: BL-1 LOADERS (2)

Ships

MAERSK COLUMBUS (1), MAERSK SENTOSA (1)

These shipments departed the U.S. in February 2022 and in January 2023. While the exact route is unknown, bill of lading data listed the origin port, destination port, and the vessel name.

Imports to the U.S.

Shipper Country: Netherlands

1. Rotterdam → Norfolk (462 total shipments)

Shippers: NORTHROP GRUMMAN INTERNATIONAL TRADING (459), LOCKHEED

MARTIN NETHERLANDS (3)

Products: CENTER FUSELAGE COMPONENTS FOR NORTHROP GRUMMAN

(459), CRATES (2), BATTERIES (1)

First Ship

MAERSK MONTANA (104), MAERSK IDAHO (85), MAERSK IOWA (71), SAFMARINE MAFADI (66), MAERSK OHIO (65), MAERSK HARTFORD (38), MAERSK TENNESSEE (23), MAERSK KANSAS (10)

These shipments occurred between December 2019 and September 2024.

2. Rotterdam → Houston (5 total shipments)

Shippers: LOCKHEED MARTIN NETHERLANDS (5)

Products: BATTERIES (5)

First Ship

MAERSK MONTANA (2), MAERSK OHIO (1), MAERSK KANSAS (1), MAERSK TENNESSEE (1)

These shipments occurred between April 2023 and May 2024.

Shipper Country: Israel

1. Haifa → Algeciras → Houston (156 total shipments)

Shippers: ISRAEL AEROSPACE INDUSTRIES LTD (139), LOCKHEED MARTIN

ISRAEL LTD (17)

Products: OUTER WING BOXES (144), BATTERIES (8), CRATES (4)

First Ship	Second Ship
MAERSK NORFOLK (34), WANDA A (29), DELPHIS	MAERSK DETROIT (24), MAERSK COLUMBUS (17),
RIGA (23), NEXOE MAERSK (18), JOSITA B (15), SAN	MAERSK SENTOSA (17), MAERSK KENSINGTON
ALVARO (11), CINDY (8), NELE MAERSK (8), NYSTED	(15), MAERSK ATLANTA (15), MAERSK KINLOSS (14),
MAERSK (5), MARIO A (2), SAFMARINE NAKURU (2),	MAERSK PITTSBURGH (12), MAERSK DENVER (12),
WANDA A (1)	MAERSK CHICAGO (10), MAERSK HARTFORD (10),
• •	MAERSK SELETAR (10)

These shipments arrived in the U.S. between May 2020 and October 2024. This route had historically been used for the shipment of F-35 components from Israel, however Maersk shifted it following the Spanish government's blocking of Maersk ships in November 2024.

2. Haifa → Algeciras → Newark (34 total shipments)

Shippers: ISRAEL AEROSPACE INDUSTRIES LTD (22), LOCKHEED MARTIN

ISRAEL LTD (12)

Products: OUTER WING BOXES (34)

First Ship	Second Ship
SAN ALVARO (7), WANDA A (6), MAERSK NORFOLK (4), NYSTED MAERSK (3), NEXOE MAERSK (3), DELPHIS RIGA (2), APOSTOLOS II (2), MARIO A (1), CONSTANTINOS P II (1), SAFMARINE NAKURU (1), WANDA A (1), NELE MAERSK (1), GLUECKSBURG (1), OREGON TRADER (1)	MAERSK DETROIT (7), MAERSK COLUMBUS (7), MAERSK ATLANTA (4), MAERSK KENSINGTON (4), MAERSK SELETAR (3), MAERSK PITTSBURGH (3), MAERSK SENTOSA (2), MAERSK KINLOSS (2), MAERSK HARTFORD (2)

These shipments arrived in the U.S. between March 2020 and September 2024. This route had historically been used for the shipment of F-35 components from Israel, however Maersk shifted it following the Spanish government's blocking of Maersk ships in November 2024.

3. Haifa → Tangier → Rotterdam → Houston (5 total shipments)

Shippers: ISRAEL AEROSPACE INDUSTRIES LTD (5)

Products: OUTER WING BOXES (5)

First Ship	Second Ship	Third Ship
MAERSK NORFOLK (3),	CAP SAN MALEAS (3), SAN	MAERSK TENNESSEE (5)
NYSTED MAERSK (2)	AUGUSTIN MAERSK (2)	

These shipments arrived in the U.S. in December 2024. This route began after the Spanish government blocked two ships from docking in Algeciras. The NYTSTED MAERSK carried goods intended to be picked up by those blocked ships and was forced to re-route to Tangier instead of Algeciras.

4. Ashdod → Rotterdam → Norfolk (4 total shipments)

Shippers: ISRAEL AEROSPACE INDUSTRIES LTD (4)

Products: OUTER WING BOXES (4)

First Ship	Second Ship
VUOKSI MAERSK (3), VAYENGA MAERSK (1)	MAERSK KANSAS (3), MAERSK IOWA (1)

These shipments arrived in the U.S. in January 2025.

5. Haifa → Tanger Med → Bremerhaven → Norfolk (2 total shipments)

Shippers: ISRAEL AEROSPACE INDUSTRIES LTD (2)

Products: OUTER WING BOXES (2)

First Ship	Second Ship	Third Ship
NEXOE MAERSK (2)	MAERSK EL PALOMAR (2)	MAERSK KANSAS (2)

These shipments arrived in the U.S. in January 2025.

6. Haifa → Langreo → Houston (2 total shipments)

Shippers: ISRAEL AEROSPACE INDUSTRIES LTD (2)

Products: OUTER WING BOXES (2)

First Ship	Second Ship
NEXOE MAERSK (2)	MAERSK SELETAR (2)

These shipments arrived in the U.S. in October 2024.

7. Haifa → Valencia → Algeciras → Houston (1 total shipments)

Shippers: LOCKHEED MARTIN ISRAEL LTD (1)

Products: BATTERIES (1)

First Ship	Second Ship	Third Ship
JPO GEMINI (1)	MAERSK NORFOLK (1)	MAERSK SELETAR (1)

This shipment arrived in the U.S. in August 2023.

Shipper Country: Italy

1. Genova → Algeciras → Houston (163 total shipments)

Shippers: LEONARDO S.P.A. (162), LOCKHEED MARTIN ITALY (1) Products: FULL WING (116), AIRCRAFT PARTS (36), SHIPPING CONTAINER

TRANSPORT DOLLY (6), J420 CONTAINER (3), BATTERIES (2)

First Ship	Second Ship
MSC EVEREST VIII (13), MSC AGADIR (13), MSC TORONTO (12), MSC CANDICE (10), MSC VITTORIA (10), C HAMBURG (8), MSC TOMOKO (8), MAERSK SHEKOU (6), MSC JUDITH (6), MSC TIANJIN (6), MSC NIOVI VIII (6), MSC ARICA (6), MSC PINA (5), NORTHERN MAGNITUDE (5), MAERSK KARLSKRONA (5), MSC MARIA ELENA (4), TOCONAO (4), MSC RACHELE (3), MAERSK SEMARANG (3), MSC PAMELA (3), SAN VICENTE (2), MSC ESTHI (2), MSC LETIZIA (2), MSC AMALFI (2), MSC SIYA B (2), SAGAMORE (2), MSC QINGDAO (2), MSC ASYA (2), GSL KALLIOPI (2), BREMEN (1), MSC LUCY (1), MSC CLEA (1), MSC ATHOS (1), MSC ALMA VII (1), MSC MAEVA (1), MSC CADIZ (1), MAERSK KLEVEN (1)	MAERSK PITTSBURGH (23), MAERSK COLUMBUS (20), MAERSK DENVER (17), MAERSK CHICAGO (16), MAERSK SELETAR (14), MAERSK KENSINGTON (13), MAERSK DETROIT (13), MAERSK SENTOSA (12), MAERSK KINLOSS (12), MAERSK ATLANTA (10), MAERSK HARTFORD (9), SAGAMORE (2), MAERSK PITTSBURG (1)

These shipments arrived in the U.S. between January 2021 and October 2024. This route was historically used for shipment of F-35 components from Italy, however Maersk shifted it following the blocking of Maersk ships by the Spanish government in November 2024. Additionally, the two shipments on the Sagamore, which occurred concurrently from December 2022 to January 2023, did not involve a vessel transfer. The Sagamore completed both legs of the trip, and thus it is listed as having two shipments attributed to it.

2. Napoli → Algeciras → Houston (8 total shipments)

Shippers: LOCKHEED MARTIN ITALY (8)

Products: BATTERIES (7), AIRCRAFT PARTS (1)

First Ship	Second Ship
NORTHERN MAGNUM (2), MAERSK KARLSKRONA (2), MSC NIOVI VIII (1), MAERSK SERANGOON (1), MAERSK PUELO (1), METHONI (1)	MAERSK HARTFORD (3), MAERSK PITTSBURGH (2), MAERSK SELETAR (1), MAERSK KINLOSS (1), MAERSK COLUMBUS (1)

These shipments arrived in the U.S. between March 2022 and December 2023.

3. Genova → Algeciras → Newark (2 total shipments)

Shippers: LEONARDO S.P.A. (2)
Products: FULL WING (2)

First Ship	Second Ship
MSC ARICA (1), MSC PARIS (1)	MAERSK COLUMBUS (1), MAERSK ATLANTA (1)

These shipments arrived in the U.S. in October 2024.

4. Livorno → Algeciras → Houston (1 total shipments)

Shippers: LOCKHEED MARTIN ITALY (1)

Products: BATTERIES (1)

First Ship	Second Ship
MSC NIOVI VIII (1)	MAERSK KENSINGTON (1)

This shipment arrived in the U.S. in August 2024.

5. Genova → Valencia → Algeciras → Houston (1 total shipments)

Shippers: LEONARDO S.P.A. (1)
Products: FULL WING (1)

First Ship	Second Ship	Third Ship
SAN VICENTE (1)	MSC VITTORIA (1)	MAERSK SELETAR (1)

This shipment arrived in the U.S. in August 2024.

Shipper Country: Norway

1. Oslo → Bremerhaven → Algeciras → Newark (2 total shipments)

Shippers: LOCKHEED MARTIN NORWAY (2)

Products: AIRCRAFT PARTS (2)

First Ship	Second Ship	Third Ship
DAGMAR (2)	SANTA CRUZ (2)	MAERSK CHICAGO (2)

These shipments arrived in the U.S. in May 2022.

2. Oslo → Bremerhaven → Houston (1 total shipments)

Shippers: LOCKHEED MARTIN NORWAY (1)

Products: BATTERIES (1)

First Ship	Second Ship
BIANCA RAMBOW (1)	MAERSK IOWA (1)

This shipment arrived in the U.S. in June 2024.

Shipper Country: France

1. Le Havre → Tangier → Algeciras → Houston (8 total shipments)

Shippers: MICHELIN FRANCE (8)

Products: TIRES (8)

First Ship	Second Ship	Third Ship
MATZ MAERSK (2), MONACO MAERSK (1), EBBA MAERSK (1), MSC NEW YORK (1), MSC HAMBURG (1), EVELYN MAERSK (1), MARCHEN MAERSK (1)	LARS MAERSK (2), SAFMARINE NOMAZWE (1), CMA CGM RHONE (1), LUNA MAERSK (1), LEDA MAERSK (1), CAPE MOSS (1), UNLABELED (1)	MAERSK COLUMBUS (3), MAERSK KENSINGTON (1), MAERSK SELETAR (1), MAERSK KINLOSS (1), MAERSK HARTFORD (1), MAERSK PITTSBURGH (1)

These shipments arrived in the U.S. between June 2022 and October 2022.

Shipper Country: Turkey

1. Turkey → Salalah, Oman → Houston (6 total shipments)

Shippers: TURKISH AEROSPACE INDUSTRIES (6)

Products: CENTER FUSELAGES (6)

Ships

MAERSK KENSINGTON (1), MAERSK KINLOSS (1), MAERSK SENANG (1), MAERSK HARTFORD (1), MAERSK CHICAGO (1), MAERSK SELETAR (1)

While the exact route and vessels of transshipment could not be identified, bills of lading listed Salalah, Oman, as the foreign port and Houston, Texas as the U.S. port. These six shipments arrived in the U.S. between March 2022 and May 2022.

website maskoffmaersk.com email maskoffmaersk@gmail.com

Research compiled by the **Palestinian Youth Movement**

The Palestinian Youth Movement (PYM) is a transnational, independent, grassroots movement of Palestinian and Arab youth struggling for the liberation of our homeland

instagram @palestinianyouthmovement **website** palestinianyouthmovement.com

