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U.S. Foreign Aid to Israel

This report provides an overview of U.S. foreign assistance to Israel. It includes a review of past aid programs, data on annual assistance, and analysis of current issues. For general information on Israel, see *Israel: Background and U.S. Relations in Brief*, by Jim Zanotti.

Israel is the largest cumulative recipient of U.S. foreign assistance since World War II. Successive Administrations, working with Congress, have provided Israel with significant assistance in light of robust domestic U.S. support for Israel and its security; shared strategic goals in the Middle East; a mutual commitment to democratic values; and historical ties dating from U.S. support for the creation of Israel in 1948. To date, the United States has provided Israel \$150 billion (current, or noninflation-adjusted, dollars) in bilateral assistance and missile defense funding. At present, almost all U.S. bilateral aid to Israel is in the form of military assistance; from 1971 to 2007, Israel also received significant economic assistance.

In 2016, the U.S. and Israeli governments signed their third 10-year Memorandum of Understanding (MOU) on military aid, covering FY2019 to FY2028. Under the terms of the MOU, the United States pledged to provide—subject to congressional appropriation—\$38 billion in military aid (\$33 billion in Foreign Military Financing grants plus \$5 billion in missile defense appropriations) to Israel.

Israel is the first international operator of the F-35 Joint Strike Fighter, the Department of Defense's fifth-generation stealth aircraft, considered to be the most technologically advanced fighter jet ever made. To date, Israel has purchased 50 F-35s in three separate contracts, funded with U.S. assistance, and has taken delivery on 30.

For FY2022, the Biden Administration requested \$3.3 billion in FMF for Israel and \$500 million in missile defense aid to mark the fourth year of the MOU. The Administration also requested \$5 million in Migration and Refugee Assistance humanitarian funding for migrants to Israel.

H.R. 4373, the Department of State, Foreign Operations, and Related Programs Appropriations Act, 2022 would, among other things, provide \$3.3 billion in Foreign Military Financing (FMF) for Israel. The Senate version, S. 3075, the Department of State, Foreign Operations, and Related Programs Appropriations Act, 2022, also would provide \$3.3 billion in FMF for Israel.

H.R. 4432 and S. 3023, the respective House and Senate defense appropriations bills for FY2022, would each provide \$500 million in missile defense funding for Israel, including \$108 million for the Iron Dome program, \$157 million for David's Sling, \$62 million for Arrow III, and \$173 million for Arrow II.

Several bills under consideration by Congress would provide \$1 billion in supplemental aid for Iron Dome over three years.

The foreign aid data in this report are compiled by the Congressional Research Service from a number of resources, including USAID's U.S. Overseas Loans and Grants (also known as the "Greenbook"), CRS communications with the State Department and the United States Agency for International Development (USAID), and annual State Department and USAID Congressional Budget Justifications. For terminology and abbreviations used in this report, see Appendix A.

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Background and Recent Trends

The United States and Israel have maintained strong bilateral relations based on a number of factors, including robust domestic U.S. support for Israel and its security; shared strategic goals in the Middle East; a mutual commitment to democratic values; and historical ties dating from U.S. support for the creation of Israel in 1948. U.S. foreign aid has been a major component in cementing and reinforcing these ties. U.S. officials and many lawmakers have long considered Israel to be a vital partner in the region, and U.S. aid packages for Israel have reflected this calculation. While some U.S. citizens have worked to cultivate U.S. support for Israel since its creation in 1948, in the years following the 1973 Yom Kippur War, advocates for Israel have engaged in organized, broad-based domestic efforts to foster bipartisan support in Congress for the bilateral relationship, including for U.S. aid to Israel.

Although bipartisan support for U.S. assistance to Israel in Congress remains robust, congressional debate over some aspects of this aid has become more frequent.¹ While bipartisan consensus on U.S. support for Israel appears to remain intact,² formerly near congressional unanimity in support of providing aid to Israel without conditions or use limitations faces challenges (see, “**Iron Dome**” below).³ In particular, the debate over U.S. aid to Israel has become more linked to controversial issues regarding Israel’s treatment of the Palestinians.⁴ Both changing developments in the Middle East itself and changing U.S. domestic public opinion may be influencing emerging debates.⁵ These developments have had little or no apparent effect on the “ironclad” U.S. commitment to Israel’s security,⁶ as evidenced by successive administrations’ opposition to conditioning aid to Israel,⁷ but they have opened political space for more of a debate on aid conditionality.

¹ Dennis Ross, “How Israel Should Navigate the New American Landscape,” *Jerusalem Strategic Tribune*, November 2021.

² On September 23, 2021, the House passed H.R. 5323, the Iron Dome Supplemental Appropriations Act, on a 420 to 9 vote (with two voting “present”).

³ In 2021, as House appropriators began considering annual Department of State, Foreign Operations, and Related Programs (SFOPs) appropriations legislation, over 300 lawmakers signed onto a letter calling for U.S. military assistance to Israel not to be reduced or conditioned. See, https://teddeutch.house.gov/uploadedfiles/2021.04.21_mou_letter_delauro_granger_signed.pdf. While congressional letters of support for continued U.S. aid to Israel are historically commonplace, it is rare for such letters to specify aid conditionality as a possible outcome.

⁴ Michael J. Koplow, “The Aftermath of the Iron Dome Debate,” *Israel Policy Forum*, September 27, 2021.

⁵ See, Lisa Lerer and Jennifer Medina, “Tensions Among Democrats Grow Over Israel as the Left Defends Palestinians,” *New York Times*, May 15, 2021. See also, “U.S. Public Has Favorable View of Israel’s People, but Is Less Positive Toward Its Government,” *Pew Research Center*, April 24, 2019. The issue of what constitutes legitimate criticism of U.S. policy toward Israel and what qualifies as the de-legitimization of Israel or even anti-Semitism (from both the left and the right) has received extensive media coverage in recent years. See, “Ari Hoffman and Joel Swanson, “Should Supporting Israel Be a Litmus Test for Participation in a Rally Against Antisemitism?” *Forward*, July 13, 2021.

⁶ U.S. Department of Defense, April 11 Joint Press Statement by Secretary of Defense Lloyd J. Austin III and Israeli Minister of Defense Benny Gantz, April 11, 2021.

⁷ During his Senate confirmation hearing, then U.S. Ambassador-designate to Israel, Thomas Nides, responded to a question on conditioning security assistance to Israel by saying, “The reality is the administration does not support conditionality on the assistance. And as you know, we’re at a \$38 billion 10-year MOU, and the position of the administration is we do not support conditionality.” See, Senate Foreign Relations Committee, Hearing on Pending Nominations, *CQ Congressional Transcripts*, Congressional Hearings, Sept. 22, 2021.

Some of the major advocacy organizations engaged on this issue, such as the American Israel Public Affairs Committee (AIPAC) and Christians United for Israel (CUFI), express unequivocal support for U.S. security assistance to Israel.⁸ J Street supports continued security assistance provided that U.S. funds do not infringe on Palestinian rights or sustain actions such as the unilateral annexation of West Bank territory.⁹ Some political groups that are not focused exclusively on Israel matters have advocated for increased scrutiny of U.S. military aid to Israel, particularly during the May 2021 conflict in Israel and Gaza.¹⁰ These groups have stimulated debates about possibly conditioning or cutting foreign aid to Israel,¹¹ or supporting boycotts and sanctions.¹²

Table I. Total U.S. Foreign Aid Obligations to Israel: 1946-2021

current, or non-inflation-adjusted, U.S. dollars in millions

Fiscal Year	Military	Economic	Missile Defense	Total
1946-2019	101,206.200	34,336.000	6,911.409	142,453.609
2020	3,300.000	-	500.000	3,800.000
2021	3,300.000	-	500.000	3,800.000
Total	107,806.200	34,336.000	7,911.409	150,053.609

Sources: U.S. Overseas Loans and Grants (Greenbook), the U.S. State Department, and the Missile Defense Agency.

Notes: The Greenbook figures do not include missile defense funding provided by the Department of Defense. According to USAID Data Services as of December 2021, in constant 2021 U.S. dollars (inflation-adjusted), total U.S. aid to Israel obligated from 1946-2021 is \$247 billion.

U.S. Aid and Israel's Advanced Military Technology

Almost all current U.S. aid to Israel is in the form of military assistance.¹³ U.S. military aid has helped transform Israel's armed forces into one of the most technologically sophisticated militaries in the world (see, "**Qualitative Military Edge (QME)**"). U.S. military aid also has helped Israel build its domestic defense industry, which now ranks as one of the top global arms exporters.¹⁴ Israeli defense companies, such as Israel Aerospace Industries (IAI), Rafael, and Elbit

⁸ For example, see AIPAC's and CUFI's policy agendas respectively at <https://www.aipac.org/s/policy-agenda> and <https://cufi.org/about/policy/policy-agenda/>

⁹ See, J Street's position on aid at <https://jstreet.org/policy/us-security-assistance-to-israel/#.YdR4gGjMKUk>.

¹⁰ Laura Kelly, "Progressive Groups Call for Biden to Denounce Evictions of Palestinians as 'War Crimes,'" *The Hill*, May 13, 2021.

¹¹ "America's Democrats are Increasingly Divided over Israel," *The Economist*, May 14, 2021.

¹² Sean Sullivan, "Supporters of a Tougher Line on Israel Split over Tactics and Message," *Washington Post*, May 30, 2021. See also, CRS Report R44281, *Israel and the Boycott, Divestment, and Sanctions (BDS) Movement*, coordinated by Jim Zanotti.

¹³ For many years, U.S. economic aid helped subsidize a lackluster Israeli economy, but since the rapid expansion of Israel's high-tech sector and overall economy in the 1990s (sparked partially by U.S.-Israeli scientific cooperation), Israel has been considered a fully industrialized nation (as of 2021, Israel's Gross Domestic Product per capita ranks 46th worldwide). Consequently, Israel and the United States agreed to gradually phase out economic grant aid to Israel. In FY2008, Israel stopped receiving bilateral Economic Support Fund (ESF) grants. It had been a large-scale recipient of grant ESF assistance since 1971.

¹⁴ According to the Stockholm International Peace Research Institute (SIPRI), from 2016 to 2020, Israel was the 8th largest arms exporter worldwide, accounting for 3% of world deliveries. See, "Trends in International Arms Transfers,

Systems, export nearly 70% of their products.¹⁵ Israel exports missile defense systems, unmanned aerial vehicles, cybersecurity products, radar, and electronic communications systems to, among others: India,¹⁶ Azerbaijan, Japan, Kazakhstan, the Philippines, Singapore, South Korea, Thailand, Vietnam, Australia, the Czech Republic, Finland, France, Germany, Greece, Italy, Russia, Switzerland, the United Kingdom, Brazil, the United Arab Emirates, and the United States.¹⁷

Israeli Exports of Spyware

Revelations regarding the export of Israeli software have drawn attention to Israel's defense export oversight which, since 2006, has been overseen by Israel's Defense Export Controls Agency (DECA). In 2021, after investigative reports revealed the Israeli-owned cyber security firm NSO Group had sold mobile phone software to foreign governments, which then used it to spy on other heads of state, dissidents, and human rights activists, the Israeli media looked more closely at DECA's export licensing process. According to one report, "The limitations on such sales are exceedingly few. Israel's current law on defense exports requires the Defense Ministry to make 'considerations regarding the end user or the end use,' but does not expressly forbid arms sales to human rights violators.... the Defense Ministry's Defense Export Controls Agency, which has a small staff and responsibility for overseeing thousands of export licenses, lacks the necessary knowledge about the countries purchasing Israeli firms' technology to assess how the products will be used."¹⁸ The U.S. Commerce Department's Bureau of Industry and Security added NSO to its "Entity List" for engaging in activities that are contrary to the national security or foreign policy interests of the United States.¹⁹ In December 2021, Israel altered its export licensing policy for cybersecurity software, requiring purchasers to pledge they will not use Israeli equipment to commit "terrorist acts" or "serious crime," as defined by DECA.²⁰

As Israel has become a global leader in certain niche defense technologies, Israeli defense exports to the U.S. market have grown substantially. According to one report, the U.S. military purchased \$1.5 billion worth of Israeli equipment in 2019, representing a five-fold increase from two decades before.²¹ In addition to the U.S. purchase of Iron Dome (**see below**), the United States has purchased, among other items, the following Israeli defense articles: Trophy active protection systems for M1 Abrams tanks, enhanced night vision goggles, laser range finders for the U.S. Marines, helmets for F-35 fighter pilots, wings for the F-35, and a system of towers, electronic sensors, radars, and cameras for use along the U.S.-Mexican border.

The United States and Israel are in the process of gradually phasing out Israel's ability to use a portion of its U.S. military assistance for domestic purchases (also known as Off-Shore Procurement – **see Figure 1**), and thus some Israeli companies have opened subsidiaries that are

2020," SIPRI Fact Sheet, March 2021.

¹⁵ Sasson Hadad, Tomer Fadlon, and Shmuel Even (editors), "Israel's Defense Industry and US Security Aid," *INSS*, Memorandum No. 202, July 2020.

¹⁶ India is the largest buyer of Israeli defense equipment. See, Rina Bassist, "Israel, India Advance on Phalcon AWACS Megadeal," *Al Monitor*, September 3, 2020.

¹⁷ Israel Ministry of Defense, Defense Export and Defense Co-Operation Agency (SIBAT), and *Jane's*, *Emerging Markets Reports*, Israel, January 19, 2022. Per a 1987 Memorandum of Understanding between the United States and Israel as amended, (Reciprocal Defense Procurement and Acquisition Policy Memorandum of Understanding), Israeli and U.S. defense contractors are able to compete in both countries for contracts on an equal basis. For the text of the MOU, see <https://www.acq.osd.mil/dpap/Docs/mou-israel.pdf>.

¹⁸ See, Judah Ari Gross, "NSO Group Affair is Latest in Israel's Long History of Arming Shady Regimes," *Times of Israel*, July 28, 2021.

¹⁹ Available online at <https://www.commerce.gov/news/press-releases/2021/11/commerce-adds-nso-group-and-other-foreign-companies-entity-list>.

²⁰ See, "Israel Issues Stricter Guidelines for use of its Cyber Tech Exports," *Reuters*, December 6, 2021.

²¹ Michael Eisenstadt and David Pollock, "Asset Test 2021: How the U.S. Can Keep Benefiting from Its Alliance with Israel," *Transition 2021: Policy Notes for the Biden Administration*, The Washington Institute for Near East Policy, February 2021.

licensed to do business in the United States. Incorporating within the United States enables Israeli companies both to increase business with the U.S. military and, in some cases, conduct U.S. aid-financed military deals with the Israeli government. As more Israeli companies have obtained a U.S. presence, it has led to increased defense partnerships between U.S. and Israeli firms, whereby weapons development is done in Israel and production is completed in the United States.²² Elbit Systems of America (Fort Worth, Texas), a wholly owned subsidiary of Israel's Elbit Systems, is one of the largest Israeli-owned firms operating in the United States. It acts as a purchasing agent for the Foreign Military Financing (FMF) and Foreign Military Sales (FMS) programs.²³

As long as these subsidiaries follow U.S. guidelines (each must be a U.S.-based supplier, manufacturer, reseller, or distributor incorporated or licensed to do business in the United States and registered with the Israeli Ministry of Defense Mission in New York),²⁴ they are eligible (pending U.S. government approval) to enter into Direct Commercial Sales (DCS) contracts²⁵ financed by FMF with the Israeli government.²⁶ Reoccurring language in annual Department of State, Foreign Operations, and Related Programs (SFOPS) appropriations bills,²⁷ as implemented by Department of Defense (DOD) guidance, permit Israel (along with Egypt, Jordan, Morocco, Tunisia, Yemen, Greece, Turkey, Portugal, and Pakistan) to use FMF to finance DCS contracts, in which the purchaser (Israel) enters into a contract directly with a vendor.²⁸

Qualitative Military Edge (QME)

U.S. military aid for Israel has been designed to maintain Israel's "qualitative military edge" over neighboring militaries.²⁹ The rationale for QME is that Israel must rely on better equipment and training to compensate for being much smaller in land area and population than most of its

²² Ora Coren, "Israel's Arms Makers to Become more American under New Military-Aid Pact," *Ha'aretz*, updated April 10, 2018.

²³ Available online at <https://elbitsystems.com/major-subidiaries/>.

²⁴ CRS conversation with U.S. State Department, Bureau of Political-Military Affairs (PM), January 6, 2022.

²⁵ Direct Commercial Contracts Division (DCC)/DCS allow a foreign entity to contract directly with a U.S.-based company in order to obtain needed supplies or services (subject to U.S. Government review and approval). This process takes the U.S. Government out of the "middleman" role that it plays in facilitating FMS transactions. See, CRS InFocus CRS In Focus IF11441, *Transfer of Defense Articles: Direct Commercial Sales (DCS)*, by Nathan J. Lucas and Michael J. Vassalotti.

²⁶ Defense Security Cooperation Agency, Guidelines for Foreign Military Financing of Direct Commercial Contracts, March 2017.

²⁷ See, for example, section headed "Foreign Military Financing Program" under Division K of the FY2021 Consolidated Appropriations Act (P.L. 116-260).

²⁸ P.L. 101-167, the Foreign Operations, Export Financing, and Related Programs Appropriations Act, 1990, states that "Only those countries for which assistance was justified for the Foreign Military Sales Financing Program in the fiscal year 1989 congressional presentation for security assistance programs may utilize funds made available under this heading for procurement of defense articles, defense services or design and construction services that are not sold by the United States Government under the Arms Export Control Act." The Defense Security Cooperation Agency's Security Assistance Manual further states that "DSCA (Directorate for Security Assistance (DSA) Direct Commercial Contracts Division (DCC)) approves DCCs to be financed with FMF on a case-by-case basis." See Chapter 9.7.3, Security Assistance Management Manual (SAMM) as Defense Security Cooperation Agency Manual 5105.38-M, DSCA Policy 12-20.

²⁹ For more coverage of this issue, see CRS Report R46580, *Israel's Qualitative Military Edge and Possible U.S. Arms Sales to the United Arab Emirates*, coordinated by Jeremy M. Sharp and Jim Zanotti.

potential adversaries.³⁰ For decades, successive Administrations, in conjunction with Congress, have taken measures to maintain Israel’s QME in a number of ways. For example,

- In practice, U.S. arms sales policy has traditionally allowed Israel **first regional access** to U.S. defense technology.³¹
- In cases in which both Israel and an Arab state operate the same U.S. platform, Israel has first received either **a more advanced version** of the platform or the ability to **customize** the U.S. system.³²
- In cases in which Israel objected to a major defense article sale to an Arab military (e.g., the 1981 sale of Airborne Early Warning and Control System aircraft or “AWACS” to Saudi Arabia), Congress has, at times, advocated for and legislated **conditions on the usage and transfer** of such weapons prior to or after a sale.³³
- The United States has compensated Israel with “**offsetting**” weapons packages or military aid when selling other U.S. major defense articles to a Middle Eastern military rival (see **textbox below**).

Over time, Congress codified informal QME-related practices in ways that encouraged a more deliberate interagency process for each major U.S. arms sale to Middle Eastern governments other than Israel.³⁴ In the 110th Congress, Representative Howard Berman sponsored legislation (H.R. 5916, Section 201) to “carry out an empirical and qualitative assessment on an ongoing basis of the extent to which Israel possesses a qualitative military edge over military threats.” After becoming Chairman of the House Foreign Affairs Committee (HFAC), then-Chairman Berman was able to incorporate this language into the Naval Vessel Transfer Act of 2008 (P.L. 110-429). The relevant QME provisions of this law had three primary elements: (1) they defined

³⁰ The concept of QME (independent of its application to Israel) dates back to the Cold War. In assessing the balance of power in Europe, U.S. war planners would often stress to lawmakers that, because countries of the Warsaw Pact had a numerical advantage over U.S. and allied forces stationed in Europe, the United States must maintain a “qualitative edge” in defense systems. For example, see, Written Statement of General William O. Gribble, Jr., Hearings on Research, Development, Test, and Evaluation Program for Fiscal Year 1973, Before Subcommittee No. 1 of Committee on Armed Services, House of Representatives, Ninety-Second Congress, Second Session, February 2, 3, 7, 9, 22, 23, 24, March 6, 7, and 8, 1972. The concept was subsequently applied to Israel in relation to its Arab adversaries. In 1981, then-U.S. Secretary of State Alexander Haig testified before Congress, saying, “A central aspect of US policy since the October 1973 war has been to ensure that Israel maintains a qualitative military edge.” Secretary of State Alexander Haig, Statement for the Record submitted in response to Question from Hon. Clarence Long, House Appropriations Subcommittee on Foreign Operations Appropriations, April 28, 1981.

³¹ For example, Israel acquired the F-15 in 1976, six years before Saudi Arabia. It received the delivery of the F-16 fighter in 1980, three years before Egypt. In 1977, P.L. 95–92 provided that “In accordance with the historic special relationship between the United States and Israel and previous agreements and continuing understandings, the Congress joins with the President in reaffirming that a policy of restraint in United States arms transfers, including arms sales ceilings, shall not impair Israel’s deterrent strength or undermine the military balance in the Middle East.”

³² “The Double Edged Sword of the Qualitative Military Edge,” *Israel Policy Forum*, April 11, 2016.

³³ See Section 131, Certification Concerning AWACS sold to Saudi Arabia, P.L. 99-83, the International Security and Development Cooperation Act of 1985.

³⁴ Prior to 2008, during congressional review of possible U.S. arms sales to the Middle East, QME concerns only were addressed on an ad hoc basis, usually through consultations between the military and committee staff. Some congressional staff felt that assessments for specific arms sales tended to be overly subjective. Because staff frequently raised QME concerns, the attempt to codify QME as a statutory requirement stemmed from a desire to rationalize the process, make it more objective, and incorporate it as a regular component of the U.S. arms sales review process to Middle Eastern governments. CRS conversation with Senate Foreign Relations Committee staff member, September 24, 2020.

QME;³⁵ (2) they required an assessment of Israel's QME every four years; and (3) they amended the Arms Export Control Act (AECA, 22 U.S.C. §2776) to require a determination, for any export of a U.S. defense article to any country in the Middle East other than Israel, that such a sale would not adversely affect Israel's QME.

Preserving QME: Offsetting Weapons Packages for Israel

The following specific instances supplemented general U.S. efforts to strengthen Israel's QME:³⁶

- In 1992, after the United States announced a sale to Saudi Arabia of F-15 fighters, the George H.W. Bush Administration provided Israel with Apache and Blackhawk helicopters and pre-positioned U.S. defense equipment in Israel for Israeli use with U.S. approval.³⁷
- In 2007, after the George W. Bush Administration agreed to sell Saudi Arabia Joint Direct Attack Munitions (JDAMs), the Administration reportedly agreed to sell more advanced JDAMs to Israel.³⁸
- In 2010, the Obama Administration agreed to sell an additional 20 F-35 aircraft to Israel in response to a sale to Saudi Arabia that included F-15s.³⁹
- In 2013, after the Obama Administration agreed to sell the UAE advanced F-16 fighters, then Secretary of Defense Chuck Hagel announced that the United States would provide Israel with KC-135 refueling aircraft, anti-radiation missiles, advanced radar, and the sale of six V-22 Osprey tilt-rotor aircraft.⁴⁰ At the time, the U.S. proposal marked the first time that the United States had offered to sell tilt-rotor Ospreys to another country. Israel would eventually cancel its planned purchase of the V-22 due to budgetary constraints.

Since the passage of the QME law and its amending of the AECA, the interagency process to assess Israel's QME has taken place behind closed doors with little fanfare. According to the Defense Security Cooperation Agency's (DSCA) Security Assistance Manual, QME determinations can be classified.⁴¹ After a QME determination has been made regarding a specific proposed sale, DSCA includes a line in the applicable congressional notification reading, "The proposed sale will not alter the basic military balance in the region."

At various times, the U.S. government reportedly has held regular consultations with Israeli officials regarding the potential impact of regional arms sales on QME.⁴² More recently, some former Obama Administration officials responded to news in 2020 of the possible sale of the F-35 (**see below**) to the United Arab Emirates (UAE) with criticism of what they perceived as a lack of time for U.S. officials and Congress to properly assess the transaction, noting that "the process of

³⁵ Section 201(d)(2) defines QME as "the ability to counter and defeat any credible conventional military threat from any individual state or possible coalition of states or from non-state actors, while sustaining minimal damage and casualties, through the use of superior military means, possessed in sufficient quantity, including weapons, command, control, communication, intelligence, surveillance, and reconnaissance capabilities that in their technical characteristics are superior in capability to those of such other individual or possible coalition of states or non-state actors."

³⁶ See, e.g., U.S. State Department, Remarks by Andrew J. Shapiro, Assistant Secretary, Bureau of Political-Military Affairs, November 4, 2011; "U.S.-Israel Strategic Cooperation: U.S. Provides Israel a Qualitative Military Advantage," *Jewish Virtual Library*.

³⁷ See, Israel Ministry of Foreign Affairs, 18 White House Statement on US Military Assistance to Israel, September 26, 1992, VOLUME 13-14: 1992-1994.

³⁸ Dan Williams, "Israel to get 'Smarter' U.S.-made Bombs than Saudis," *Reuters*, January 13, 2020.

³⁹ Eli Lake, "In Gates Book, Details of Israel's Hard Bargaining over Saudi Arms," *Daily Beast*, January 10, 2014.

⁴⁰ "U.S. Near \$10 Billion Arms Deal with Israel, Saudi Arabia, UAE," *Reuters*, April 19, 2013.

⁴¹ See <https://www.samm.dsca.mil/chapter/chapter-5>.

⁴² For an example, see Barbara Opall-Rome, "Israeli Brass Decry U.S. Arms Sales to Arab States," *Defense News*, January 23, 2012. At the time this article was published, the U.S. side of the working group was led by the Under Secretary of Defense for Policy and Assistant Secretary of State for Political-Military Affairs, while the Israeli side was led by the Defense Ministry's policy chief and the Israel Defense Forces director of planning.

military consultations with Israel on a given weapons system typically took several years of extensive defense shuttle diplomacy, completed before formally notifying Congress of the arms sale package.⁴³ One Member of Congress wrote that previous QME determinations encompassed “classified negotiations that got to the heart of Israel’s defense capabilities.”⁴⁴

Lawmakers have amended or attempted to amend aspects of the 2008 law. The U.S.-Israel Strategic Partnership Act (P.L. 113-296) amended Section 36 of the AECA to require that the Administration explain, in cases of sales or exports of major U.S. defense equipment to other Middle Eastern states, what is “Israel’s capacity to address the improved capabilities provided by such sale or export.”⁴⁵ Most recently, in the 116th Congress, Representative Bradley Schneider sponsored (H.R. 8494), the Guaranteeing Israel’s QME Act of 2020, which would have required the President to consult with Israeli officials before making a QME determination.⁴⁶

The Proposed F-35 Sale to the United Arab Emirates (UAE) and Israel’s QME

Prior to 2020, the UAE had no formal diplomatic relations with Israel, but the two small, technologically advanced countries had been gradually and secretly increasing their bilateral cooperation for decades.⁴⁷ By 2020, the regional diplomatic environment presented a favorable opportunity to formalize the relationship. At the time, the UAE had faced significant U.S. and other foreign criticism for its military interventions in Yemen and Libya, its use of spyware against domestic and foreign opponents,⁴⁸ and its isolation of fellow Gulf Cooperation Council (GCC) member Qatar. At the same time, then Israeli Prime Minister Benjamin Netanyahu had secured a pledge from his new partners in a coalition government to support Israeli annexation of parts of the West Bank, a move likely to be seen as inflammatory across the Arab world.⁴⁹

Within this context, the Trump Administration, Israel, and the UAE jointly negotiated an Israel-UAE diplomatic normalization agreement during the summer of 2020 in exchange for Israel agreeing to suspend its annexation plans. In support of the set of bilateral agreements that came to be known as the “Abraham Accords,” the Trump Administration also pledged to sell to the UAE

⁴³ Barbara A. Leaf and Dana Stroul, “The F-35 Triangle: America, Israel, the United Arab Emirates,” *War on the Rocks*, September 15, 2020. See also, Andrew Shapiro and Derek Chollet, “Selling F-35s to the Middle East Was Never Going to Be Easy,” *Defense One*, September 14, 2020.

⁴⁴ Representative Elissa Slotkin, “The Importance of Preserving Israel’s Qualitative Military Edge,” *Medium.com*, September 14, 2020.

⁴⁵ The Act also requires the Administration to evaluate “how such sale or export alters the strategic and tactical balance in the region, including relative capabilities; and Israel’s capacity to respond to the improved regional capabilities provided by such sale or export,” and include “an identification of any specific new capacity, capabilities, or training that Israel may require to address the regional or country-specific capabilities provided by such sale or export; and a description of any additional United States security assurances to Israel made, or requested to be made, in connection with, or as a result of, such sale or export.”

⁴⁶ In the 115th Congress, Representative Schneider sponsored H.R. 2833, Defending Israel’s QME Act of 2017.

⁴⁷ Dion Nissenbaum, “Secret Ties Paved Way for U.A.E., Israel Deal,” *Wall Street Journal*, August 15, 2020.

⁴⁸ Mark Mazzetti, Nicole Perlroth and Ronen Bergman, “It Seemed like a Popular Chat App. It’s Secretly a Spy Tool,” *New York Times*, December 22, 2019.

⁴⁹ Israel Democracy Institute, Coalition Agreement for the Establishment of an Emergency and National Unity Government in Israel, April 20, 2020.

the advanced F-35 Joint Strike Fighter aircraft⁵⁰ and armed drones (**see below**).⁵¹ Previously, the United States had repeatedly denied UAE requests to purchase the F-35, while allowing Israel to become the first Middle East operator of the fifth generation platform in 2017 (**see, “F-35” below**). UAE officials say the country has sought since 2014 to buy the F-35.

Israel has long held aerial superiority in the Middle East due to both the skill of its pilots and the American-built planes in its fleet. Israel is the sole Middle Eastern country that operates the F-35, and this possession of a fifth generation aircraft, along with its older, but still formidable, squadrons of F-15Is and F-16Cs, provides it with a significant advantage over neighboring Arab states. No other Middle Eastern air force currently possesses a stealth fighter akin to the F-35. While other regional air forces possess advanced fourth generation fighters—such as Saudi Arabia (Boeing F-15SA), Qatar (Boeing F-15QA), the UAE (Lockheed Martin F-16 Block 60 E/F Desert Falcon),⁵² and Egypt (Dassault Rafale)—the F-35’s advanced sensors and its ability to share information with legacy aircraft give Israel’s older fighters a situational awareness of the battlefield that no other regional state possesses.

During the last few months of the 116th Congress, many lawmakers largely welcomed the signing of the Israel-UAE normalization agreement while asserting congressional prerogatives to thoroughly review any potential related arms sales to the UAE, particularly as they relate to the QME.⁵³ Some lawmakers raised questions as to whether the sale of the F-35 to Middle Eastern countries other than Israel would automatically erode Israel’s QME. In a September 2020 SFRC hearing, then Ranking Member Robert Menendez asked then Under Secretary of State for Political Affairs David Hale how the State Department was going to adhere to the 2008 law on QME if the sale of the F-35 to the UAE went forward. In his response, Hale remarked that:

We have a large group of people at the Pentagon and at the State Department who evaluate based on technical criteria and assessments of security and what it is that the Israelis have and what it is that our partners need. And they will make recommendations to the Secretary of State and then we have a consultative process with Israel. It occurs every year. There’s an executive session in which it’s a closed session in which we talked about these things.⁵⁴

On October 9, Senators Menendez and Reed sent a letter to then Secretary of State Michael Pompeo posing a series of questions about the possible sale that they asserted “must be fully

⁵⁰ See CRS Report R46580, *Israel’s Qualitative Military Edge and Possible U.S. Arms Sales to the United Arab Emirates*, coordinated by Jeremy M. Sharp and Jim Zanotti.

⁵¹ Amy Spiro, “Pompeo Says F-35 Sale to UAE was ‘Critical’ to the Abraham Accords,” *Times of Israel*, June 10, 2021.

⁵² The UAE’s Block 60 E/F Desert Falcon is considered a 4.5 generation fighter and the most advanced F-16 variant in the world. See, Tyler Rogoway, “Here’s What the Ball on the Nose of UAE’s Block 60 F-16E/F Desert Falcon Does,” *The War Zone* (online), September 19, 2019.

⁵³ Senate Majority Leader Mitch McConnell expressed his view that “We in Congress have an obligation to review any U.S. arms sales package linked to the [Israel-UAE] deal. As we help our Arab partners defend against growing threats, we must continue ensuring that Israel’s qualitative military edge remains unchallenged.” See, Congressional Record, Senate Speeches and Inserts, Page S5563, September 14, 2020. Then Senate Foreign Relations Committee (SFRC) Chairman Jim Risch stressed his view of the need for congressional consultations on preserving Israel’s QME and upholding requirements in the AECA. See, Eric Shawn, “Trump Administration’s Proposed F-35 Sale to UAE Hits Snag,” *Fox News*, October 7, 2020. On September 15, 2020, then HFAC Chairman Eliot Engel sponsored a resolution (H.Res. 1110) that, among other things, would have reaffirmed Congress’ commitment to maintaining Israel’s QME. Prior to the resolution, several House lawmakers wrote a letter to President Trump warning that they would oppose any arms sale that would threaten Israel’s QME. See, Rep. Schneider Leads Dem Call Defending Israel’s Qualitative Military Edge, Press Release, September 11, 2020.

⁵⁴ Senate Foreign Relations Committee, hearing entitled, “U.S. Policy in a Changing Middle East,” September 24, 2020.

answered before this sale is sent to Congress for review, as required by statute.”⁵⁵ On October 20, Senators Menendez and Feinstein introduced S. 4814, the Secure F-35 Exports Act of 2020. This legislation would have, among other things, required a certification by the President before the provision of F-35 aircraft to a Middle Eastern country other than Israel that such sale would not undermine Israel’s QME.

A few Members expressed outright opposition to a proposed sale of the F-35 to the UAE.⁵⁶ Representative Gregory Meeks stated that he was “absolutely opposed to that sale because we don’t know what’s happening in the future. I’ve seen it happen before.... I think that it violates Israel’s strategic interest and safety.”⁵⁷

On November 10, 2020, the Trump Administration notified Congress of a \$23 billion arms sale to the UAE, to include F-35s, drones, and various munitions. As mentioned above, the sale was proposed to support UAE-Israel diplomatic normalization. An effort to block the proposed sale in the Senate failed to garner the required votes (S.J.Res. 77 and S.J.Res. 78).⁵⁸ President Trump issued a Statement of Administration Policy expressing his opposition to the resolutions of disapproval, noting:

These sales are consistent with the longstanding commitment and statutory obligation of the United States to maintain Israel’s Qualitative Military Edge (QME). The Department of State, in consultation with the Department of Defense, has included in its certification to Congress a determination that these sales will not adversely affect Israel’s QME. In a joint statement on October 23, Israeli Prime Minister Benjamin Netanyahu and Defense Minister Benny Gantz endorsed the delivery of advanced defense capabilities to the UAE, noting the commitments by the United States to maintain Israel’s QME. Transfer of enhanced capabilities to a partner after normalization of relations with Israel is consistent with decades-long United States precedent. The United States provided enhanced security capability to Egypt following its 1979 normalization of relations with Israel, and provided enhanced security capability to Jordan following its 1994 normalization of relations with Israel.⁵⁹

In the last hours of the Trump presidency, the UAE signed a Letter of Offer and Acceptance or LOA (not a contract) to purchase up to 50 F-35s and 18 MQ-9 Reaper drones from the United States.⁶⁰ The Biden Administration temporarily paused the sale for review upon taking office, but

⁵⁵ Available at: <https://www.foreign.senate.gov/imo/media/doc/10-09-20%20RM%20Reed%20letter%20to%20Pompeo%20Esper%20re%20F-35%20UAE.pdf>.

⁵⁶ See, for example, Representative Debbie Wasserman Schultz, “Trump Puts Israel’s Security in Danger with Deal to Sell Fighter Jets to United Arab Emirates,” *Miami Herald*, September 5, 2020.

⁵⁷ Jacob Kornbluh, “Rep. Meeks Expresses ‘Absolute’ Opposition to Sale of F-35 Jets to UAE,” *Jewish Insider*, September 24, 2020.

⁵⁸ During floor consideration of the resolutions, then Senate Majority Leader McConnell stated that “Israel’s Ambassador, Defense Minister, and Prime Minister have all made sure they are comfortable with this deal.” See, Congressional Record, Senate Speeches And Inserts, Page S7247, Dec. 8, 2020. Senator Cornyn argued that the sales would “allow greater military cooperation between the United States, the UAE, and Israel and strengthen a growing coalition of aligned forces in the region.” See, Congressional Record, Senate Speeches And Inserts, Page S7268, Dec. 8, 2020. Other lawmakers, such as Senator Menendez, argued against the sales and raised the possibility that they would exacerbate arms proliferation in the region and impact Israel’s QME. See, Press Release, “Menendez Delivers Floor Remarks on Joint Resolutions of Disapproval of Trump Administration’s Proposed Arms Sale to UAE,” December 9, 2020.

⁵⁹ Executive Office of the President, Office of Management and Budget, Statement of Administration Policy, S.J.Res. 77, S.J.Res. 78, S.J.Res. 79, and S.J.Res. 80, Providing for Congressional Disapproval of the Proposed Export to the United Arab Emirates of Certain Defense Articles and Services, December 9, 2020

⁶⁰ Mike Stone, “UAE Signs Deal with U.S. to Buy 50 F-35 Jets and up to 18 Drones: Sources,” *Reuters*, January 20,

a State Department spokesperson told journalists in April 2021 that the Administration planned to proceed with the sale.⁶¹ In April 2021, SFRC Chairman Menendez re-introduced the SECURE F-35 Exports Act of 2021 (S. 1182).

As of January 2022, a contract between the UAE and Lockheed Martin for the F-35 had yet to be reached or approved by the Biden Administration. In November 2021, Deputy Assistant Secretary of State for Regional Security Mira Resnick said, “We’ve had quite a robust and sustained dialogue with Emirati officials.... and I anticipate a continued, robust and sustained dialogue with the UAE to ensure that any defense transfers meet our mutual national security strategic objectives.... while protecting US technology.... It’s a real game-changing opportunity for the UAE and for our partnership, and we look forward to implementing that sale.”⁶² The UAE’s ongoing relationship with China is one potential obstacle to concluding the F-35 sale. In November 2021, the Biden Administration demanded an immediate halt to Chinese construction of a reported military facility at Khalifa port, about 50 miles north of Abu Dhabi, where Chinese company Cosco operates a commercial container terminal.⁶³ Both the Trump and Biden Administrations have pressed the UAE to remove Chinese telecommunications firm Huawei Technologies Company from its network before the United States sells the Emiratis the F-35. The UAE, which seeks to build a 5G system, has countered that it requires more time and an alternative supplier before considering Huawei’s removal.⁶⁴

U.S. Bilateral Military Aid to Israel

Since 1999, overall U.S. assistance to Israel has been outlined in 10-year government-to-government Memoranda of Understanding (MOUs). MOUs are not legally binding agreements like treaties, and thus do not require Senate ratification. Also, Congress may accept or change year-to-year assistance levels for Israel or provide supplemental appropriations. Nevertheless, past MOUs have significantly influenced the terms of U.S. aid to Israel; Congress has appropriated foreign aid to Israel largely according to the terms of the MOU in place at the time. P.L. 116-283, the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (hereinafter referred to as “**the 2021 NDAA**”), contains Section 1273 of the United States Israel Security Assistance Authorization Act of 2020, which authorizes “not less than” \$3.3 billion in annual FMF to Israel through 2028 per the terms of the current MOU (**see below**).

2021.

⁶¹ U.S. Department of State, “Secretary Antony J. Blinken at a Press Availability,” Remarks to the Press, January 27, 2021; “Joe Biden Is Proceeding with Donald Trump’s Biggest Arms Deal,” *Huffington Post*, April 13, 2021.

⁶² Jared Szuba, “Intel: US, UAE Talk F-35 as Russia Pitches Stealth Aircraft,” *Al Monitor*, November 17, 2021.

⁶³ Gordon Lubold and Warren P. Strobel, “China Move in U.A.E. Thwarted --- U.S. Rang Alarm about Building of Suspected Military Facility at Port on Mideast Ally’s Turf,” *Wall Street Journal*, November 20, 2021.

⁶⁴ Nick Wadhams and Sylvia Westall, “Biden Prods UAE to Dump Huawei, Sowing Doubts on Key F-35 Sale,” *Bloomberg*, June 11, 2021.

Brief History of MOUs on U.S. Aid to Israel

The first 10-year MOU (FY1999-FY2008), agreed to under the Clinton Administration, was known as the “Glide Path Agreement” and represented a political commitment to provide Israel with at least \$26.7 billion in total economic and military aid over its duration (of which \$21.3 billion was in military aid).⁶⁵ This MOU provided the template for the gradual phase-out of all economic assistance to Israel.

In 2007, the Bush Administration and the Israeli government agreed to a second MOU consisting of a \$30 billion military aid package for the 10-year period from FY2009 to FY2018. Under the terms of that agreement, Israel was explicitly permitted to continue spending up to 26.3% of U.S. assistance on Israeli-manufactured equipment (known as Off-Shore Procurement or OSP - **discussed below**). The agreement stated that “Both sides acknowledge that these funding levels assume continuation of adequate levels for U.S. foreign assistance overall, and are subject to the appropriation and availability of funds for these purposes.”⁶⁶

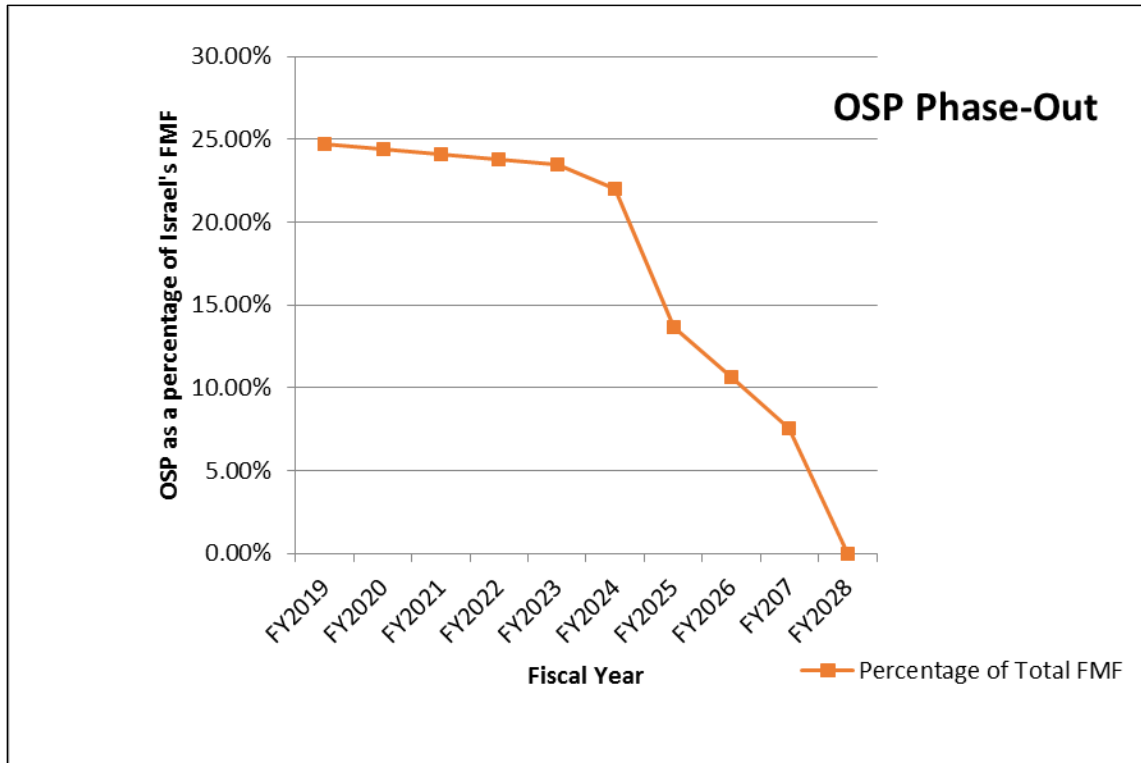
The Current 10-Year Security Assistance Memorandum of Understanding (MOU)

At a signing ceremony at the State Department on September 14, 2016, representatives of the U.S. and Israeli governments signed another 10-year MOU on military aid covering FY2019 to FY2028. Under the terms of this third MOU, the United States pledges, subject to congressional appropriation, to provide \$38 billion in military aid (\$33 billion in FMF grants, plus \$5 billion in defense appropriations for missile defense programs) to Israel. According to the terms of the MOU, “Both the United States and Israel jointly commit to respect the FMF levels specified in this MOU, and not to seek changes to the FMF levels for the duration of this understanding.”⁶⁷

⁶⁵ See, Joint Statement by President Clinton and Prime Minister Ehud Barak, July 19, 1999. According to the statement, “The United States and Israel will sign a Memorandum of Understanding (MOU) which will express their joint intention to restructure U.S. bilateral assistance to Israel. The MOU will state the United States’ intention to sustain its annual military assistance to Israel, and incrementally increase its level by one-third over the next decade to a level of \$2.4 billion subject to Congressional consultations and approval. At the same time, the MOU will provide for a gradual phase-out of U.S. economic aid to Israel, over a comparable period, as the Israeli economy grows more robust, less dependent on foreign aid, and more integrated in world markets.”

⁶⁶ United States-Israel Memorandum of Understanding, Signed by then U.S. Under Secretary of State R. Nicholas Burns and Israeli Ministry of Foreign Affairs Director General Aaron Abramovich, August 16, 2007.

⁶⁷ Memorandum of Understanding between the United States and Israel, September 14, 2016.

Figure I. Phasing Out Off-Shore Procurement (OSP) Under the MOU

Source: CRS.

The terms of the FY2019-FY2028 MOU differ from previous agreements on issues such as,

- Phasing out Off-Shore Procurement (OSP).**⁶⁸ Under the terms of the third MOU, OSP will decrease slowly until FY2024, but will then be phased out more dramatically over the MOU's last five years, ending entirely in FY2028 (see **Figure 1**). The MOU calls on Israel to provide the United States with "detailed programmatic information related to the use of all U.S. funding, including funds used for OSP." In response to the planned phase-out of OSP, some Israeli defense contractors may be seeking to merge with U.S. companies or open U.S. subsidiaries to continue their eligibility for defense contracts financed through FMF (see, "U.S. Aid and Israel's Advanced Military Technology").⁶⁹
- Missile Defense.** Under the terms of the third MOU, the Administration pledges to request \$500 million in annual combined funding for missile defense programs with joint U.S.-Israeli elements—such as Iron Dome, Arrow II and Arrow III, and David's Sling. Previous MOUs did not include missile defense funding, which has traditionally been appropriated via separate interactions between successive Administrations and Congresses. While the MOU commits both the United

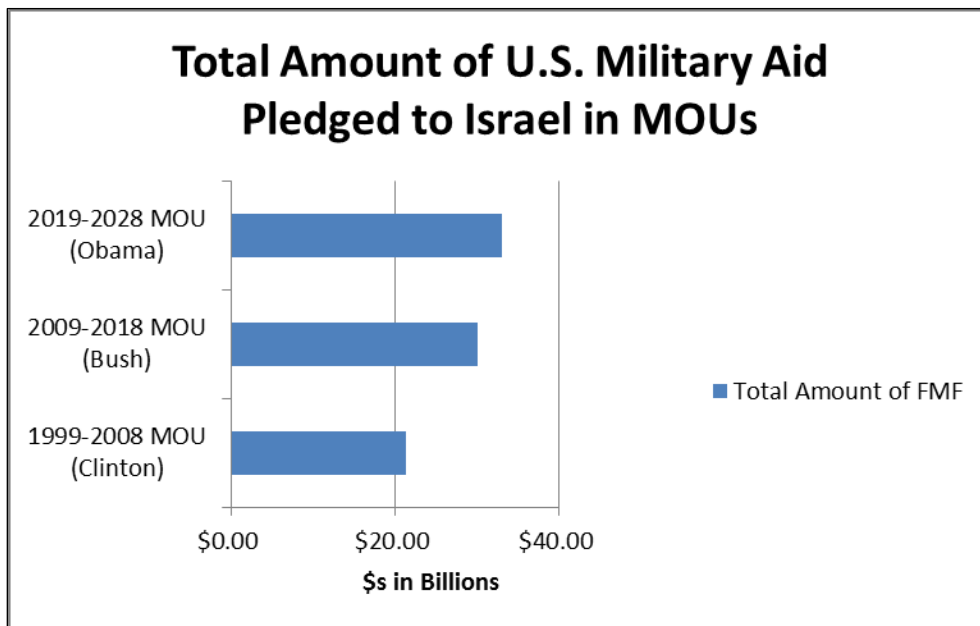
⁶⁸ Section 42(c) (22 U.S.C. §2791(c)) of the AECA prohibits using funds made available under this Act for procurement outside the United States unless the President determines that such procurement does not have an adverse effect on the economy of the United States or the industrial mobilization base. Executive Order 13637 designated this authority to the Secretary of Defense and the issuance of an OSP waiver requires concurrence by the Departments of State and Commerce. See, U.S. Department of Defense, Defense Security Cooperation Agency, Security Assistance Manual, Chapter 9.

⁶⁹ "Israeli UAV Firm agrees deal for Unnamed US Company," *Jane's Defence Weekly*, July 18, 2017.

States and Israel to a \$500 million annual U.S. missile defense contribution, it also stipulates that under exceptional circumstances (e.g., major armed conflict involving Israel), both sides may agree on U.S. support above the \$500 million annual cap (see, “**The May 2021 War in Gaza and Proposed Supplemental Iron Dome Funding**”).

- **No FMF for Fuel.** According to the third MOU, Israel will no longer be permitted to use a portion of its FMF to purchase fuel (or “other consumables”) from the United States. Under the second MOU, Israel had budgeted an estimated \$400 million a year in FMF to purchase jet fuel from the United States. Congressional appropriators have indicated in annual foreign assistance legislation that they support FMF used to subsidize Israeli purchases of U.S. jet fuel.⁷⁰ In July 2020, DSCA notified Congress of a major defense sale to Israel of 990 million gallons of petroleum-based products, including jet fuel, for an estimated cost of \$3 billion.⁷¹

Figure 2. U.S. Military Aid to Israel over Decades



Source: CRS Graphics.

Notes: Figures included Foreign Military Financing only. Missile defense funds are not included. Figures are not adjusted for inflation.

⁷⁰ The White House, Office of the Press Secretary, Fact Sheet: Memorandum of Understanding Reached with Israel, September 14, 2016. In the Committee report accompanying H.R. 2839, the Department of State, Foreign Operations, and Related Programs Appropriations Act, 2020, appropriators wrote: “The Committee notes that Israel maintains the flexibility under the MOU to purchase jet fuel from the United States.” See, H.Rept. 116-78 - State, Foreign Operations, and Related Programs Appropriations Bill, 2020. That same provision was reinserted into H.Rept. 116-444, - State, Foreign Operations, and Related Programs Appropriations Bill, 2021. The explanatory statement accompanying the FY2021 Consolidated Appropriations Act directs federal agencies to comply with “the directives, reporting requirements, and instructions” contained in H.Rept. 116-444 accompanying H.R. 7608.

⁷¹ Defense Security Cooperation Agency, “Israel—Jp-8 Aviation Fuel, Diesel Fuel, and Unleaded Gasoline,” Transmittal 20-44, July 6, 2020.

Foreign Military Financing (FMF) and Arms Sales

Israel is the largest recipient of FMF. For FY2022, the President's request for Israel would encompass approximately 53% of total requested FMF funding worldwide. Annual FMF grants to Israel represent approximately 16.5% of the overall Israeli defense budget.⁷² Israel's defense expenditure as a percentage of its Gross Domestic Product (5.6% in 2020) is one of the highest in the world.⁷³

Cash Flow Financing

Section 23 of the AECA (22 U.S.C. §2763) authorizes the President to finance the "procurement of defense articles, defense services, and design and construction services by friendly foreign countries and international organizations, on such terms and conditions as he may determine consistent with the requirements of this section." Successive Administrations have used this authority to permit Israel to utilize FMF funds to finance multiyear purchases in advance of their appropriations from Congress, rather than having to pay the full amount of such purchases up front.⁷⁴ Known as "cash flow financing," this benefit enables Israel to negotiate major arms purchases with U.S. defense suppliers with payments scheduled over a longer time horizon.⁷⁵

Cash flow financing and its derivatives also have allowed Israel to use U.S. government-approved sources of external financing to support the procurement of major U.S. defense systems, such as combat aircraft. Beginning with its purchase of F-16D aircraft from Lockheed Martin over 20 years ago and continuing presently with ongoing procurement of the F-35, the United States has utilized what is known as the "Deferred Payments Program."⁷⁶ This program allows Israel to

⁷² The Israeli Ministry of Defense provides funding figures for its domestic defense budget but excludes some procurement spending and spending on civil defense. The estimate referenced above is based on figures published by *Jane's Sentinel Security Assessment - Eastern Mediterranean*, "Israel - Defence Budget Overview," October 4, 2021. Jane's removes FMF from its Israeli defense budget calculations to reflect how much Israel independently spends on defense.

⁷³ Four other nations spend more on defense as a percentage of GDP: Saudi Arabia, Oman, Algeria, and Kuwait. See Stockholm International Peace Research Institute (SIPRI), Military expenditure by country as percentage of gross domestic product, 1988-2020, SIPRI Military Expenditure Database, 1949-2020.

⁷⁴ The United States initially began authorizing installment-style sales to Israel to help it rebuild its military capabilities after the 1973 war with Egypt and Syria. Congress appropriated \$2.2 billion for Israel in P.L. 93-199, the Emergency Security Assistance Act of 1973. Section 3 of that act stated that "Foreign military sales credits [loans or grants] extended to Israel out of such funds shall be provided on such terms and conditions as the President may determine and without regard to the provisions of the Foreign Military Sales Act as amended." At the time, the Foreign Military Sales Act of 1968 (amended in 1971 and the precursor to the Arms Export Control Act of 1976), capped the annual amount of foreign military sales credit that could be extended to a recipient at no more than \$250 million per year. Under the authorities contained in P.L. 93-199, President Nixon, in two separate determinations (April and July 1974), allocated the \$2.2 billion to Israel as \$1.5 billion in grant military aid, the largest U.S. grant aid package ever for Israel at the time. The remaining \$700 million was designated as a military loan. A year and a half later, the Ford Administration reached a new arms sales agreement with Israel providing that, according to the *New York Times*, "the cost of the new military equipment would be met through the large amount of aid approved by the just-completed session of Congress as well as the aid that will be approved by future Congresses." See, "U.S. Decides to Sell Some Arms to Israel That It Blocked in the Past," *New York Times*, October 12, 1976.

⁷⁵ Cash flow financing is defined in Section 25(d) of the AECA and Section 503(a)(3) of the Foreign Assistance Act of 1961, as amended.

⁷⁶ Under this arrangement, Lockheed Martin sells Citibank a legal claim on its defense contract with Israel. The U.S. Defense Department then repays Citibank using the available FMF allocation for Israel. The Israeli government uses its own national funds to pay interest on the Citibank loans. One organization in support of continued U.S. support for Israel has advocated for Congress to authorize the use of FMF to cover Israeli interest payments on weapons deals to creditors. See, Jonathan Ruhe, Charles B. Perkins, and Ari Cicurel, "Israel's Acceleration of U.S. Weapons

defer payments owed under its LOA for F-35 aircraft and use future year FMF appropriations to make payments pursuant to a pre-determined payment schedule. Upon deferral of a given payment by Israel, a private bank (in the case of the F-35, a small consortium led by Citibank) pays Lockheed Martin in full and Lockheed Martin assigns its right to be paid by the U.S. Government to the bank.⁷⁷ In 2021, Israel's "security cabinet" (formally known as the Ministerial Committee on Defense) approved plans to allocate over \$9 billion in future FMF appropriations to finance the purchases of various U.S. weapons systems, such as the Sikorsky CH-53K heavy lift helicopter and additional F-35 aircraft (**see below**). Various news reports indicate that the Israeli government is pursuing a delay of the payments coming due under the Deferred Payment Program in order to assist in financing these near-term foreign military sales acquisitions.⁷⁸

In Foreign Military Sales cases in which Israel and the United States seek to execute LOAs beyond the scope of the current MOU (either beyond FY2028 or above the \$33 billion pledged), the U.S. government has established a "Special Billing Arrangement" or SBA with Israel. The purpose of SBAs, according to DSCA, is to "improve cash management for eligible FMS partners."⁷⁹ Under an SBA, Israel may use national cash reserves for funding requirements associated with an FMS case (e.g., funds to cover termination liability) that exceeds the amount of funds listed in or duration of the current MOU.⁸⁰

Early Transfer and Interest Bearing Account

Since FY1991 (P.L. 101-513), Congress has mandated that Israel receive its FMF aid in a lump sum during the first month of the fiscal year.⁸¹ P.L. 116-260, the Consolidated Appropriations Act, FY2021 (herein after referred to as "**the FY2021 Consolidated Appropriations Act**") states, "That of the funds appropriated under this heading, not less than \$3,300,000,000 shall be available for grants only for Israel which shall be disbursed within 30 days of enactment of this Act." Once disbursed, Israel's military aid is transferred to an interest bearing account with the U.S. Federal Reserve Bank.⁸² Israel has used interest collected on its military aid to pay down, among other things, its bilateral debt (nonguaranteed) to U.S. government agencies, which,

Procurement: Analysis and Recommendations, *The Jewish Institute for National Security of America (JINSA)*, February 2021. However, according to DSCA, it is unclear whether FMF is legally available for that purpose.

⁷⁷ CRS Correspondence with DSCA, January 2022.

⁷⁸ Avi Bar-Eli, "Analysis | 'Okay, but Never Again': How Israel Air Force Sealed \$9 Billion U.S. Arms Deal," *Ha'aretz*, February 9, 2021 and "Israel's Military Skirts Budget Restrictions for \$9 Billion Air Force Upgrade," *AI Monitor*, February 10, 2021.

⁷⁹ See Chapter 9.10.2, Security Assistance Management Manual (SAMM) as Defense Security Cooperation Agency Manual 5105.38-M, DSCA Policy 12-20.

⁸⁰ According to DSCA, "Since requirements and procedures are unique to each country, they are normally established in an agreement between the customer country, DSCA, and the appropriate banking institutions in the U.S. and the purchaser's country." See, Defense Security Cooperation University, Security Cooperation Management, Chapter 12, Edition 41, May 2021.

⁸¹ On at least one occasion when government operations were funded by a continuing appropriations resolution, Congress has included provisions in the resolution preventing the early transfer of FMF to Israel until the final appropriations bill for that fiscal year was passed. See Section 109 of P.L. 113-46, the Continuing Appropriations Act, 2014.

⁸² According to DSCA, "Some countries may establish an account with the federal reserve bank (FRB), New York, for their FMS [Foreign Military Sales] deposits. An agreement between the FMS purchaser's defense organization, the purchaser's central bank, FRB New York and DSCA identifies the terms, conditions, and mechanics of the account's operation. Countries receiving FMFP funds must maintain their interest bearing account in the FRB." See, Defense Institute of Security Assistance Management (DISAM), "The Management of Security Cooperation (Green Book)," 34th Edition, April 2015.

according to the U.S. Department of the Treasury, stood at \$11.8 million as of March 2021.⁸³ Israel cannot use accrued interest for defense procurement inside Israel.

Shorter Congressional Review Period

Per provisions in the AECA, Israel, along with NATO member states, Japan, Australia, South Korea, and New Zealand (commonly referred to as NATO+5) have shorter congressional review periods (15 days instead of 30) and higher dollar notification thresholds than other countries for both government-to-government and commercially licensed arms sales.⁸⁴

F-35 Joint Strike Fighter

Israel was the first declared international operator of the F-35 Joint Strike Fighter.⁸⁵ It has purchased 50 F-35s (called *Adirs*⁸⁶) in three separate contracts using FMF grants. As of September 2021, Israel had received 30 of 50 jets, which it has divided into two squadrons (the 116th ‘Lions of the South’ and 105th ‘Golden Eagle’ squadrons) based at Nevatim Air Base in southern Israel.⁸⁷ From there and without any aerial refueling, Israel’s F-35s could strike targets in Syria, Iraq, Lebanon, Jordan, and most of Egypt, Turkey, and Saudi Arabia.⁸⁸ To date, Israel reportedly has used its F-35 aircraft to conduct aerial strikes inside Syria.⁸⁹

Figure 3. U.S. and Israeli F-35s Fly in Formation

Joint Exercise Enduring Lightning III (October 2020)



Source: U.S. Air Force.

The Department of Defense’s F-35 program is an international cooperative program in which Israel (and Singapore) are considered “security cooperation participants” outside of the F-35 cooperative development partnership.⁹⁰ As a result, Israel is not eligible to assign staff to the F-35 Joint Program Office in Washington and does not receive

⁸³ Foreign Credit Reporting System (FCRS), Amounts Due the U.S. Government, United States Department of the Treasury, Office of Global Economics and Debt.

⁸⁴ See CRS Report RL31675, *Arms Sales: Congressional Review Process*, by Paul K. Kerr.

⁸⁵ In September 2008, DSCA notified Congress of a possible Foreign Military Sale of up to 75 F-35s to Israel in a deal with a possible total value of \$15.2 billion. See, Defense Security Cooperation Agency, Transmittal No. 08-83, Israel - F-35 Joint Strike Fighter Aircraft, September 29, 2008.

⁸⁶ “After F-35 makes Aliyah, it will get new Israeli identity,” *Israel Hayom*, May 2, 2016. In Hebrew, “Aliyah” refers to geographical relocation to Israel. “Adir” is a Hebrew word for “mighty” or “powerful.”

⁸⁷ Yaakov Lappin, “Israeli Air Force Favouring Additional F-35s,” *Jane’s Defence Weekly*, September 10, 2020.

⁸⁸ Gareth Jennings, “Israel Declares F-35 to Be Operational,” *Jane’s Defence Weekly*, December 6, 2017.

⁸⁹ “F-35 Stealth Fighter Sees First Combat, in Israeli Operation,” *BBC News*, May 22, 2018 and “Israel - Air Force,” *Jane’s World Air Forces*, July 5, 2019.

⁹⁰ See CRS Report RL30563, *F-35 Joint Strike Fighter (JSF) Program*, by Jeremiah Gertler.

full F-35 technical briefings.⁹¹ The United States government and Lockheed Martin retain exclusive access to the F-35's software code, which Israel is not permitted to alter.

However, Israel's involvement in the F-35 program is extensive, with Israeli companies making F-35 wing sets (IAI) and helmets (Elbit Systems). Israel also received significant development access to the F-35 and the ability to customize its planes with Israeli-made C4 (command, control, communications, computers) systems, under the condition that the software coding be done by the United States. In 2018, the Navy awarded Lockheed Martin a \$148 million contract for "the procurement of Israel-unique weapons certification, modification kits, and electronic warfare analysis."⁹² Software upgrades (called Block 3F+) added to the main computer of Israel's F-35s reportedly facilitate the "use of Israeli-designed electronic equipment and weaponry," thereby permitting Israel to "employ its own external jamming pod and also allow internal carriage of indigenous air-to-air missiles and guided munitions."⁹³ In December 2021, the Defense Department awarded a \$49 million contract to Lockheed Martin to support work on "an F-35 variant 'tailored' for an undisclosed FMS customer," probably Israel.⁹⁴

In October 2020, the United States and Israel conducted their third Enduring Lightning joint aviation exercise using the F-35. American and Israeli pilots trained together to counter both surface and air adversaries, while supporting units assisted with refueling, radar, and opponent simulations.

KC-46A Pegasus

In March 2020, DSCA notified Congress of a planned sale to Israel of eight KC-46A Boeing "Pegasus" aircraft for an estimated \$2.4 billion.⁹⁵ According to Boeing, the KC-46A Pegasus is a multirole tanker (can carry passengers, fuel, and equipment) that can refuel all U.S. and allied military aircraft. After Japan, Israel is the second country approved by the United States to receive the KC-46A. The Israel Air Force's current fleet of tankers was originally procured in the 1970s; Israel is anticipated to use the KC-46A to refuel its F-35 fighters, a key capability in projecting force toward Iran and elsewhere.⁹⁶

Figure 4. F-35 Helmet Mounted Display

Made by Israeli Manufacturer Elbit Systems



Source: Elbit Systems Ltd.

Note: The F-35 Helmet Mounted Display is a joint venture between Elbit Systems and Rockwell Collins.

⁹¹ "Israel," *Jane's World Air Forces*, September 1, 2020.

⁹² U.S. Department of Defense, U.S. Navy, Contracts For February 2, 2018.

⁹³ Gareth Jennings, "Israel Stands-Up Second F-35 Unit," *Jane's Defence Weekly*, January 17, 2020.

⁹⁴ Gareth Jennings, "Lockheed Martin to Design and Develop F-35 Variant 'Tailored' for Foreign Customer," *Jane's Defence Weekly*, December 29, 2021.

⁹⁵ Defense Security Cooperation Agency, Israel—KC-46A Aerial Refueling Aircraft, Transmittal No 20-12, March 3, 2020.

⁹⁶ Seth J. Frantzman, "Israel Inks \$3 Billion Deal for KC-46 Tankers, CH-53 Helos," *Defense News*, January 4, 2022.

In February 2021, Israel signed an LOA to buy two KC-46As and, in January 2022, it reached a second LOA for two additional tankers. Delivery of the Pegasus tankers is anticipated at some point in 2024, though Israel’s government has sought to expedite this timetable.⁹⁷ In January 2022, five House lawmakers wrote a letter to President Biden seeking justification for why the KC-46A delivery timetable cannot be accelerated.⁹⁸

CH-53K Heavy Lift Helicopters

In late 2021, Israel signed an LOA with the United States to purchase 12 Sikorsky “King Stallion” CH-53K Heavy Lift helicopters for \$2 billion. The deal will enable Israel to replace its older model Sikorsky Yasur helicopters, which have been in use for nearly half a century.⁹⁹ Delivery is anticipated sometime between 2025 and 2026.

Figure 5. The KC46A Pegasus



Source: U.S. Air Force

Excess Defense Articles

The Excess Defense Articles (EDA) program provides a means by which the United States can advance foreign policy objectives—assisting friendly and allied nations—while also reducing its inventory of outdated or excess equipment. This program, managed by DSCA, enables the United States to provide friendly countries with supplies in excess of the requirements of U.S., at either reduced rates or no charge.¹⁰⁰

⁹⁷ Joseph Trevithick, “Israel’s Request To Speed Delivery Of KC-46 Tankers Critical For Striking Iran Denied - The War Zone,” *The Drive*, December 14, 2021.

⁹⁸ Andrew Clevenger, “Biden should Expedite Delivery of KC-46s to Israel, GOP Lawmakers Say,” *CQ News*, January 7, 2022.

⁹⁹ U.S. Naval Air Systems Command, “Israel to purchase CH-53K King Stallion,” *NAVAIR News*, January 4, 2022.

¹⁰⁰ To access DSCA’s Excess Defense Articles database, see <http://www.dsca.mil/programs/eda>.

As a designated “major non-NATO ally,”¹⁰¹ Israel is eligible to receive EDA under Section 516(a) of the Foreign Assistance Act (FAA) and Section 23(a) of the AECA. According to DSCA, from 2010 to 2019, Israel received at least \$385 million in EDA deliveries (current value).¹⁰²

Table 2. Selected Notified U.S. Foreign Military Sales to Israel¹⁰³

Amount/Description	Cong. Notice	Primary Contractor(s)	Estimated Cost
75 F-35A Joint Strike Fighter (Lightning II) Aircraft	2008	Lockheed Martin	\$15.2 billion
JP-8 aviation fuel, diesel fuel, and unleaded gasoline	2013	N/A	\$2 billion
600 AIM-9X-2 Sidewinder Block II Air-air missiles and associated equipment	2014	Raytheon	\$544 million
14,500 Joint Direct Attack Munitions (JDAM) and associated equipment	2015	Various	\$1.879 billion
Equipment to support Excess Defense Articles sale of 8 SH-60F Sea Hawk Helicopters	2016	Science and Engineering Services and General Electric	\$300 million
13 76mm naval guns and technical support	2017	DRS North America	\$440 million
240 Namer armored personal carrier power packs and associated equipment	2019	MTU America	\$238 million
KC-46A aerial refueling aircraft	2020	Boeing Corporation	\$2.4 billion
JP-8 aviation fuel, diesel fuel, and unleaded gasoline	2020	N/A	\$3 billion
18 CH-53K Heavy Lift Helicopters (with support equipment)	2021	Lockheed Martin (parent company of Sikorsky) and General Electric Company	\$3.4 billion

Sources: Defense Security Cooperation Agency, Stockholm International Peace Research Institute Arms Transfer Database, IHS Jane’s.

Note: All figures are approximate.

¹⁰¹ On November 4, 1986, President Reagan signed into law P.L. 99-661, the National Defense Authorization Act for FY1987. In Section 1105 of that act, Congress called for greater defense cooperation between the United States and countries that the Secretary of Defense could designate as a “major non-NATO ally” (MNNA). Such cooperation could entail U.S. funding for joint research and development and production of U.S. defense equipment. In February 1987, the United States granted Israel MNNA status along with several other countries (Egypt, Japan, South Korea, and Australia). According to press reports at the time, in the absence of a U.S.-Israeli mutual defense agreement, supporters of Israel had been advocating for Israel to receive “equal treatment” with regard to certain special military benefits (such as the ability to bid on U.S. defense contracts) that NATO allies received from the United States. See, “Israel seeks to obtain the kind of Financial Aid that NATO Members get from U.S. Government,” *Wall Street Journal*, February 3, 1987. Nearly a decade later, Congress passed additional legislation that further solidified Israel’s MNNA status. In 1996, Section 147 of P.L. 104-164 amended the Foreign Assistance Act of 1961 by requiring the President to notify Congress 30 days before designating a country as a MNNA. According to the act, Israel, along with several other countries, “shall be deemed to have been so designated by the President as of the effective date of this section, and the President is not required to notify the Congress of such designation of those countries.” See, 22 U.S.C. §2321j.

¹⁰² Excess Defense Articles Database Tool, Defense Security Cooperation Agency.

¹⁰³ For information on the status of Israeli procurement plans regarding key aircraft platforms such as F-15IA, V-22 Osprey, and KC-46A, see “Israel - Air Force,” *Jane’s World Air Forces*, July 5, 2019.

Defense Budget Appropriations for U.S.-Israeli Missile Defense Programs

Congress and successive Administrations have demonstrated strong support for joint U.S.-Israeli missile defense projects designed to thwart a diverse range of threats. Due to Iranian weapons proliferation and the rapid spread of drone technology throughout the Middle East, Israel faces a bevy of state and non-state actors in possession of sophisticated precision-guided missiles, unmanned aerial vehicles, and guided and unguided rockets. While the near-term threats of short-range missiles and rockets launched by non-state actors such as Hamas and Hezbollah remain, the development of Iranian proxies in Syria, Iraq, and Yemen, as well as Iran's own advancement in precision guided munitions, have opened new fronts for Iran-backed groups to potentially threaten Israel's security.

Congress provides regular U.S. funding for Israeli and U.S.-Israeli missile defense programs in defense authorization and appropriations bills. Israel and the United States each contribute financially to several weapons systems and engage in co-development, co-production, and/or technology sharing in connection with them. Since 2001, Israel and the United States have conducted a joint biennial ballistic missile defense exercise, called Juniper Cobra,¹⁰⁴ to work on integrating their weapons, radars, and other systems.¹⁰⁵

The following section provides background on Israel's four-layered active defense network: Iron Dome (short range), David's Sling (low to mid-range), Arrow II (upper-atmospheric), and Arrow III (exo-atmospheric). In addition to these existing systems, Israel, the U.S. Missile Defense Agency, and various private defense contractors are working on next generation defense systems, such as Arrow IV¹⁰⁶ and various ground and air-based laser systems.¹⁰⁷ On February 1, 2022, Israeli Prime Minister Naftali Bennett said, "In about a year, the IDF will launch a laser interception system, at first experimentally and later it will become operational, first in the south and then elsewhere....This will allow us in the medium to long term to surround Israel with a laser wall that protects us from missiles, rockets, UAVs, and other threats."¹⁰⁸

Iron Dome

Iron Dome is a short-range anti-rocket, anti-mortar, and anti-artillery system (intercept range of 2.5 to 43 miles) developed by Israel's Rafael Advanced Defense Systems and originally produced in Israel. Iron Dome's targeting system and radar are designed to fire its Tamir interceptors only at incoming projectiles that pose threats to the area being protected (generally, strategically important sites, including population centers); it is not configured to fire on rockets outside of that area. Israel can move Iron Dome batteries as threats change (there is a sea-variant of Iron Dome

¹⁰⁴ The IDF postponed the 2022 Juniper Cobra exercise. See, Anna Ahronheim, "IDF Delays Juniper Cobra Drill amid Russian, Iranian Tensions," *Jerusalem Post*, February 8, 2022.

¹⁰⁵ The United States and Israel also jointly conduct a military exercise known as Juniper Falcon, which is designed to enhance interoperability between both nations' militaries.

¹⁰⁶ Udi Shaham, "Israel, US developing Arrow-4," *Jerusalem Post*, February 19, 2021.

¹⁰⁷ Anna Ahronheim, "Lockheed Martin, Rafael Join Forces to Build 'Ground-Based' Laser Weapon," *Jerusalem Post*, July 28, 2021.

¹⁰⁸ "Bennett Reveals: IDF to use Laser Interception System in a Year," *7Israel National News (Arutz Sheva)*, February 1, 2022.

as well). Currently, Israel has ten Iron Dome batteries deployed throughout the country, and each battery is designed to defend a 60-square-mile populated area.¹⁰⁹

Co-production and U.S. Funding

To date, the United States has provided \$1.7 billion to Israel for Iron Dome batteries, interceptors, co-production costs, and general maintenance (see Table 5). Because Iron Dome was developed by Israel alone, Israel initially retained proprietary technology rights to it. The United States and Israel have had a decades-long partnership in the development and co-production of other missile defense systems (such as the Arrow). As the United States began financially supporting Israel's development of Iron Dome in FY2011, U.S. interest in ultimately becoming a partner in its co-production grew. Congress then called for Iron Dome technology sharing and co-production with the United States.¹¹⁰

Figure 6. Iron Dome Launcher



Source: Raytheon.

U.S. Army Procurement of Iron Dome

U.S. efforts to acquire Iron Dome have come in the context of lawmakers' expressed concern over a lack of capability to protect American soldiers deployed overseas from possible sophisticated cruise missile attacks.¹¹¹ Congress directed the Army to take interim steps to procure additional systems.¹¹² Section 112 of P.L. 115-232, The John S. McCain National Defense Authorization Act for Fiscal Year 2019, required the Secretary of Defense to certify whether there is a need for the U.S. Army to deploy an interim missile defense capability (fixed-site, cruise missile defense capability) and, if so, to deploy additional batteries. In response to this mandate, the U.S. Army procured two Iron Dome batteries from Rafael at a cost of \$373 million. The Army justified the purchase by referencing Iron Dome's high interception rate as well as the Tamir interceptor's low cost relative to existing U.S. missile defense systems.¹¹³ After testing various systems, in September 2021, the U.S. Army selected Dynetics' Enduring Shield system, rather than Iron Dome, to fulfill its "Indirect Fire Protection Capability".¹¹⁴ Since then, the Army temporarily deployed one Iron Dome battery to Guam for further testing. Section 111 of P.L. 117-81, the National Defense Authorization Act for Fiscal Year 2022, amends the 2019 NDAA to eliminate a mandate for two additional U.S. Army purchases of Iron Dome. Currently, the U.S. Marine Corps is evaluating Iron Dome to fulfill its "Medium Range Intercept Capability (MRIC)."

¹⁰⁹ Each battery has three to four launchers loaded with up to 20 Tamir interceptors per launcher for a total of 60-80 interceptors per battery. Every Iron Dome Battery also comes equipped with vehicles to reload launchers.

¹¹⁰ In conference report language accompanying P.L. 112-239, the National Defense Authorization Act for FY2013, conferees agreed: "The Department of Defense needs to obtain appropriate data rights to Iron Dome technology to ensure us the ability to use that data for U.S. defense purposes and to explore potential co-production opportunities. The conferees support this policy and expect the Department to keep the congressional defense committees informed of developments and progress on this issue."

¹¹¹ Jen Judson, "Congress Wants new Plans from Army on its Indirect Fire Protection Suite Development," *Defense News*, September 18, 2018.

¹¹² In 2018, some Members of Congress advocated for the selection of Iron Dome to protect U.S. troops deployed abroad against threats emanating from Russia and North Korea. See, "Bipartisan House Letter requests Iron Dome Use for US Army," *Jewish Telegraphic Agency*, April 24, 2018.

¹¹³ "US Army Buys Israel's Iron Dome for Tactical Missile Defense," *Jewish Policy Center*, January 22, 2019.

¹¹⁴ Andrew Eversden, "Dynetics Beats Out Iron Dome for \$237M Army Missile Defense Contract," *Breaking Defense*, September 27, 2021.

In March 2014, the United States and Israeli governments signed a co-production agreement to enable the manufacture of components of the Iron Dome system in the United States, while also providing the U.S. Missile Defense Agency (MDA) with full access to what had been proprietary Iron Dome technology.¹¹⁵ U.S.-based Raytheon is Rafael’s U.S. partner in the co-production of Iron Dome.¹¹⁶ In 2020, the two companies formed a joint venture incorporated in the United States known as “Raytheon Rafael Area Protection Systems (R2S).” Tamir interceptors (the U.S. version is called SkyHunter) are manufactured at Raytheon’s missiles and defense facility in Tucson, Arizona and elsewhere and then assembled in Israel. Israel also maintains the ability to manufacture Tamir interceptors within Israel.

The May 2021 War in Gaza and Proposed Supplemental Iron Dome Funding

Overview

As previously mentioned, Congress and successive Administrations have demonstrated strong support for joint U.S.-Israeli missile defense. However, nearly nine months after Israel’s May 2021 conflict with Hamas in Gaza, an Israeli government request for supplemental U.S. military aid to replenish its stocks of interceptor missiles for the Iron Dome short-range anti-rocket system remains pending with Congress. See **Table 3 below** for some examples and timetables for the congressional appropriation of emergency aid to Israel following the outbreak of regional conflict.

Table 3. Select Examples of Emergency Aid to Israel

Conflict/Crisis	Congressional Action	Enactment
Israel’s Operation Protective Edge in Gaza (July 8-August 26, 2014)	\$225 million in supplemental aid for Iron Dome (P.L. 113-145)	August 4, 2014
U.S. Invasion of Iraq (March 20-May 1, 2003)	\$1 billion in military aid and \$9 billion in U.S.-backed loan guarantees (P.L. 108-11)	April 16, 2003
Operation Desert Storm against Iraq and Iraqi missile attacks against Israel (January 17 – February 28, 1991)	\$650 million in economic aid to pay for damages incurred during Persian Gulf War (P.L. 102-21)	March 28, 1991

Source: Congress.gov.

Background

For eleven days in May 2021, Israel and Hamas (a U.S.-designated terrorist organization), fought their fourth major conflict since Hamas took control of the Gaza Strip in 2007. In Israel, 12 people were killed, while in Gaza, more than 250 people (including more than 60 children) were killed. During the conflict, armed Palestinian groups (mostly Hamas and Palestine Islamic Jihad) fired barrages of mortars and rockets (and sent explosive-laden drones) into Israel in an attempt to

¹¹⁵ The co-production agreement is formally titled, “Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the State of Israel Concerning Iron Dome Defense System Procurement.”

¹¹⁶ The FY2014 Emergency Supplemental Appropriations Resolution, P.L. 113-145, exempted \$225 million in Iron Dome funding—requested by Israel on an expedited basis during the summer 2014 Israel-Gaza conflict—from the co-production requirements agreed upon in March 2014.

overwhelm Iron Dome's radar.¹¹⁷ These militants fired 4,369 rockets/mortars into Israel, of which 3,400 reached Israel. Of the 3,400, 1,428 were headed toward populated areas, and Iron Dome intercepted and destroyed 1,357, a 95% success rate.¹¹⁸ While Hamas rockets are relatively cheap to produce, the Iron Dome is costly to maintain. The unit cost of Iron Dome's Tamir interceptors, according to one source, may be approximately \$53,000.¹¹⁹

In the aftermath of the conflict, President Joseph Biden assured Israel of his “full support to replenish Israel’s Iron Dome short-range anti-rocket system to ensure its defenses and security in the future.”¹²⁰ In early June 2021 during a visit to Israel, Senator Lindsey Graham suggested that Israel was planning to request up to \$1 billion in supplemental aid for Iron Dome.¹²¹ Soon thereafter, Israeli Defense Minister Benny Gantz traveled to Washington DC, where he formally requested additional U.S. financing. In August, the Administration informed Congress that supplemental aid for Iron Dome had its “unequivocal support,” should Congress choose to proceed in “funding the request.”¹²²

Selected Chronology of Congressional Action on Israel and Iron Dome: 2021-2022

Date	Legislative Event
May 2021	Senator Bill Hagerty introduced S. 1751, the Emergency Resupply for Iron Dome Act of 2021, which would direct the President to transfer all unexpended balances of appropriations made available for assistance to Gaza to the Department of Defense for grants to Israel for Iron Dome.
May/June 2021	During House consideration of H.R. 3237, the Emergency Security Supplemental Appropriations Act, 2021, Representative Tony Gonzales proposed a Motion to Recommit (MTR), stating that “if we adopt the motion to recommit, we will instruct the Committee on Appropriations to consider my amendment to H.R. 3237. It would provide emergency funding for the Iron Dome defense system...” ¹²³ Representative Gonzales’s amendment would have included \$73 million for Iron Dome, as part of a \$500 million total appropriation for all 4 jointly funded Israeli missile defense systems. The MTR was not adopted. Several weeks later, some lawmakers reportedly considered adding Iron Dome supplemental funding to H.R.3237. ¹²⁴ Congress passed H.R.3237 in July (P.L. 117-31) without Iron Dome aid.
June 2021	During House floor consideration of H.R. 256, “To repeal the Authorization for Use of Military Force Against Iraq Resolution of 2002,” HFAC Ranking Member Representative Michael McCaul filed an MTR in order to offer an amendment that would have established “contingency plans to provide Israel with defense articles such as munitions, ISR technology, aircraft, and related services. It would also

¹¹⁷ Mona El-Naggar, “Gaza’s Rockets: A Replenished Arsenal that Vexes Israel,” *New York Times*, May 13, 2021.

¹¹⁸ Shlomo Maital, “Iron Dome: The Inside Story,” *The Jerusalem Report*, July 26, 2021.

¹¹⁹ Yaniv Kubovich, “Israeli Army Wants Laser Interceptors Operational by 2022,” *Ha’aretz*, October 19, 2021.

¹²⁰ The White House, Remarks by President Biden on the Middle East, May 20, 2021.

¹²¹ “U.S. Senator Expects U.S. to Send More Funds for Israel’s ‘Iron Dome,’” *Reuters*, June 1, 2021.

¹²² Senate Foreign Relations, Subcommittee on Near East, South Asia, Central Asia, and Counterterrorism, Hearing entitled, “U.S. Security Assistance in the Middle East,” August 10, 2021.

¹²³ See, Congressional Record, Emergency Security Supplemental to Respond to January 6th Appropriations Act, 2021, page H2629, May 20, 2021.

¹²⁴ Jennifer Shutt, “Iron Dome Funds May Hitch a Ride on Capitol Security Supplemental,” *CQ News*, June 3, 2021.

	create a waiver to expedite arms transfers if Israel is under threat of military attack.” ¹²⁵ The MTR failed to pass.
July 2021	On July 1, Minority Leader Kevin McCarthy sought unanimous consent to consider H.J.Res 54, which would provide \$1 billion for Iron Dome over three years. The motion was not considered and, instead, referred to the Committees on Appropriations and Budget.
September 2021	On September 21, the House Rules Committee published a draft of H.R. 5305, the Extending Government Funding & Delivering Emergency Assistance Act, which would include \$1 billion in supplemental assistance for Iron Dome. Within hours of the announcement, some lawmakers reportedly objected to the inclusion of Iron Dome. ¹²⁶ Subsequently, appropriators pulled the Iron Dome funding from the legislation.
September 2021	On September 22, Senator Richard Shelby introduced S.2789, the Extending Government Funding and Delivering Emergency Assistance Act. This continuing resolution would have funded the government until December 3 included \$1 billion in Iron Dome supplemental aid over three years.
September 2021	On September 23, the House voted (by a 420-9 margin, with two voting “present”) to pass the Iron Dome Supplemental Appropriations Act, 2022 (H.R. 5323), which would provide \$1 billion in supplemental funding for Iron Dome over the next three years (FY2022-FY2024).
September 2021	On September 23, Senator Marco Rubio introduced S.2830, the Iron Dome Supplemental Appropriations Act, 2022, which would provide \$1 billion for Iron Dome over a three-year period. Senator Ted Cruz also introduced S.2839, which also would provide \$1 billion for Iron Dome over three years.
October 2021	In early October, the Senate tried to pass H.R.5323 by unanimous consent. However, Senator Rand Paul argued that while he supports supplemental aid for Iron Dome, the funding should come from funds previously obligated for Afghanistan. ¹²⁷
October 2021	On October 6, Senator Paul introduced S.2944, the Funding Iron Dome by Defunding the Taliban Act. This bill would provide \$1 billion for Iron Dome over three years and would rescind all “of the unobligated balances from the amounts appropriated or otherwise made available to the covered funds for reconstruction activities in Afghanistan.”
October 2021	On October 20, 2021, Senator Jon Tester introduced S.3032, the FY2022 Defense Appropriations bill. This annual appropriations bill includes the full \$500 million U.S. commitment for Israel’s missile defense per the 2016 MOU (of which \$108 million is for Iron Dome), and also would provide an additional \$1 billion over three years for Iron Dome.
December 2021	On December 15, 2021, Senator Paul objected to a motion seeking unanimous consent for a floor vote on Iron Dome supplemental aid, the fourth time he had done so since September 2021. ¹²⁸

¹²⁵ House Foreign Affairs Committee, Republicans, “McCaul Speaks on House Floor on Amendment to Reaffirm the U.S. will Provide Defense Assistance to Israel,” June 17, 2021.

¹²⁶ Erik Wasson, Jarrell Dillard, and Billy House, “Democrats Strip Funds for Israel from Bill to Raise Debt Ceiling,” *Bloomberg*, September 21, 2021.

¹²⁷ Congressional Record, Senate Procedural Matters, Motion to Discharge, Page S6954, Oct. 7, 2021.

¹²⁸ Melissa Weiss, “Paul again Blocks Unanimous Consent Vote on Iron Dome Supplemental Funding,” *Jewish Insider*, December 16, 2021.

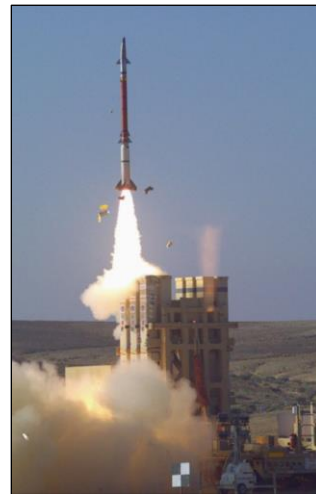
David's Sling

Overview

In August 2008, Israel and the United States officially signed a “project agreement” to co-develop the David's Sling system.¹²⁹ David's Sling (aka Magic Wand) is a short/medium-range system designed to counter long-range rockets and slower-flying cruise missiles fired at ranges from 25 miles to 186 miles, such as those possessed by Iran, Syria, and Hezbollah in Lebanon. David's Sling is designed to intercept missiles with ranges and trajectories for which Iron Dome and/or Arrow interceptors are not optimally configured. It has been developed jointly by Rafael Advanced Defense Systems and Raytheon.¹³⁰ David's Sling uses Raytheon's Stunner missile for interception, and each launcher can hold up to 16 missiles. In April 2017, Israel declared David's Sling operational and, according to one analysis, “two David's Sling batteries are sufficient to cover the whole of Israel.”¹³¹

Israel first used David's Sling in July 2018. At the time, Syrian regime forces were attempting to retake parts of southern Syria as part of the ongoing conflict there. During the fighting, Assad loyalists fired two SS-21 Tochka or ‘Scarab’ tactical ballistic missiles at rebel forces, but the missiles veered into Israeli territory. David's Sling fired two Stunner interceptors, but the final impact point of the Syrian missiles changed mid-flight, and Israel ordered one of the interceptors to self-destruct; the other most likely landed in Syrian territory.¹³² Chinese media claimed that Assad regime forces recovered the Stunner interceptor intact and handed it over to Russia; the Israeli government did not comment on this allegation.¹³³

Figure 7. David's Sling Launches Stunner Interceptor



Source: Israel Ministry of Defense.

¹²⁹ This joint agreement is a Research, Development, Test and Evaluation (RDT&E) Framework agreement between the United States and Israel. The joint program to implement the agreement is known as the Short Range Ballistic Missile Defense (SRBMD) David's Sling Weapon System (DSWS) Project. The Department of Defense/U.S.-Israeli Cooperative Program Office manages the SRBMD/DSWS program, which is equitably funded between the United States and Israel.

¹³⁰ See Raytheon Missile and Defense, David's Sling System and SkyCeptor Missile at <https://www.raytheonmissilesanddefense.com/capabilities/products/davidssling>

¹³¹ “IDF officially declares David's Sling Operational,” *Jane's Defence Weekly*, April 3, 2017.

¹³² See, “Israel, US Complete Successful Advanced David's Sling Missile Tests,” *Jerusalem Post*, March 20, 2019, and “David's Sling has Dubious Debut against Syrian Missiles,” *Jane's Defence Weekly*, July 25, 2018.

¹³³ Tyler Rogoway, “If an Israeli Stunner Missile Really Did Fall Into Russian Hands It Is a Huge Deal,” *The Drive*, November 13, 2019.

Co-production and U.S. Funding

Since FY2006, the United States has contributed over \$2.1 billion to the development of David's Sling (see **Table 5**). In June 2018, the United States and Israel signed a co-production agreement for the joint manufacture of the Stunner interceptor. Some interceptor components are built in Tucson, Arizona, by Raytheon.

The Arrow and Arrow II

Under a 1986 agreement allowing Israel to participate in the Strategic Defense Initiative (SDI), the United States and Israel have co-developed different versions of the Arrow anti-ballistic missile, and, since 1988, Israel and the United States have engaged in joint development.¹³⁴ The Arrow is designed to counter short-range ballistic missiles. The United States has funded just under half of the annual costs of the development of the Arrow Weapon System, with Israel supplying the remainder. The total U.S. financial contribution (for all Arrow systems) has exceeded \$4 billion (see **Table 4**). The system became operational in 2000 in Israel and has been tested successfully.

The Arrow II program (officially referred to as the Arrow System Improvement Program or ASIP), a joint effort of Boeing and IAI, is designed to defeat longer-range ballistic missiles. One Arrow II battery is designed to protect large swaths of Israeli territory. In March 2017, media sources reported the first known use of the Arrow II, when they said that it successfully intercepted a Syrian surface-to-air missile (SAM) that had been fired on an Israeli jet returning to Israel from an operation inside Syria.¹³⁵

In August 2020, nearly 20 years after the first Arrow system became operational, Israel successfully tested the Arrow II system. According to one account of the test, Arrow II “successfully intercepted a Sparrow simulated long-range, surface-to-surface missile, which could one day be fired at Israel by Iran...”¹³⁶

¹³⁴ Shortly after the start of the Strategic Defense Initiative (SDI) in 1985, the Reagan Administration sought allied political support through various cooperative technology agreements on ballistic missile defense (BMD). A memorandum of understanding was signed with Israel on May 6, 1986, to jointly develop an indigenous Israeli capability to defend against ballistic missiles. Subsequently, a number of additional agreements were signed, including, for example, an April 1989 Memorandum of Agreement (MOA) to develop an Israeli computer facility as part of the Arrow BMD program, a June 1991 agreement to develop a second generation Arrow BMD capability, and a September 2008 agreement to develop a short-range BMD system to defend against very short-range missiles and rockets. Israeli interest in BMD was strengthened by the missile war between Iran and Iraq in the later 1980s, and the experience of being attacked by Scud missiles from Iraq during Operation Desert Storm in 1991.

¹³⁵ For more information, See U.S. Department of Defense, Missile Defense Agency, Arrow at https://www.mda.mil/news/gallery_internationalcoop_arrow.html

¹³⁶ Anna Ahronheim, “Israel Successfully Carries out Arrow 2 Interception. Test Simulated Shooting Down of Long-Range Missile, Including Possibly from Iran,” *Jerusalem Post*, August 14, 2020.

Table 4. U.S. Contributions to the Arrow Program (Arrow, Arrow II, and Arrow III)
current U.S. dollars in millions

Fiscal Year	Total	Fiscal Year	Total	Fiscal Year	Total
1990	52.000	2004	144.803	2018	392.300
1991	42.000	2005	155.290	2019	243.000
1992	54.400	2006	122.866	2020	214.000
1993	57.776	2007	117.494	2021	250.000
1994	56.424	2008	118.572		
1995	47.400	2009	104.342		
1996	59.352	2010	122.342		
1997	35.000	2011	125.393		
1998	98.874	2012	125.175		
1999	46.924	2013	115.500		
2000	81.650	2014	119.070		
2001	95.214	2015	130.908		
2002	131.700	2016	146.069		
2003	135.749	2017	272.224		
				Total	4,013.811

Source: U.S. Missile Defense Agency.

High Altitude Missile Defense System (Arrow III)

Citing a potential nuclear threat from Iran, Israel has sought a missile interceptor that operates at a higher altitude and greater range than the original Arrow systems. In October 2007, the United States and Israel agreed to establish a committee to evaluate Israel’s proposed “Arrow III,” an upper-tier system designed to intercept medium-range ballistic missiles outside the atmosphere. The Arrow III is a more advanced version—in terms of speed, range and altitude—of the current Arrow II interceptor. In 2008, Israel decided to begin development of the Arrow III and the United States agreed to co-fund its development despite an initial proposal by Lockheed Martin and the DOD urging Israel to purchase the Terminal High-Altitude Area Defense (THAAD) missile defense system instead. In March 2019, the United States deployed a THAAD missile battery to Israel.

The Arrow III, made (like the Arrow II) by IAI and Boeing, has been operational since January 2017. The United States and Israel signed an Arrow III co-production agreement in June 2019; their co-production of Arrow III components is ongoing.¹³⁷ A U.S.-based subsidiary of IAI, Stark Aerospace Inc. based in Columbus, Mississippi, is producing canisters for the Arrow III system. Since co-development began in 2008, Congress has appropriated \$1.1 billion for Arrow III (see **Table 5**). In January 2022, Israel successfully tested Arrow III with reported breakthroughs in the system’s algorithmic detection of incoming projectiles and calculation of interception launch trajectories.¹³⁸

¹³⁷ In July 2010, the United States and Israel signed a bilateral agreement (The Upper-Tier Interceptor Project Agreement) to extend their cooperation in developing and producing the Arrow III, including an equitable U.S.-Israeli cost share.

¹³⁸ Judah Ari Gross, “Israel Successfully Tests Arrow 3 Anti-Ballistic Missile System,” *Times of Israel*, January 18, 2022.

Table 5. Defense Budget Appropriations for U.S.-Israeli Missile Defense: FY2006-FY2021

current U.S. dollars in millions

Fiscal Year	Arrow II	Arrow III (High Altitude)	David's Sling (Short-Range)	Iron Dome	Total
FY2006	122.866	—	10.0	—	132.866
FY2007	117.494	—	20.4	—	137.894
FY2008	98.572	20.0	37.0	—	155.572
FY2009	74.342	30.0	72.895	—	177.237
FY2010	72.306	50.036	80.092	—	202.434
FY2011	66.427	58.966	84.722	205.000	415.115
FY2012	58.955	66.220	110.525	70.000 ^a	305.700
FY2013 After Sequestration	40.800	74.700	137.500	194.000	447.000
FY2014	44.363	74.707	149.712	460.309 (includes supp)	729.091
FY2015	56.201	74.707	137.934	350.972	619.814
FY2016	56.519	89.550	286.526	55.000	487.595
FY2017	67.331	204.893	266.511	62.000	600.735
FY2018	82.300	310.000	221.500	92.000	705.800
FY2019	163.000	80.000	187.000	70.000	500.000
FY2020	159.000	55.000	191.000	95.000	500.000
FY2021	173.000	77.000	177.000	73.000	500.000
Total	1,453.476	1,265.779	2,170.317	1,727.281	6,616.853

a. These funds were not appropriated by Congress but reprogrammed by the Obama Administration from other Department of Defense accounts.

Emergency U.S. Stockpile in Israel

In the early 1980s, Israeli leaders sought to expand what they called their “strategic collaboration” with the U.S. military by inviting the United States to stockpile arms and equipment at Israeli bases for American use in wartime.¹³⁹ Beginning in 1984, the United States began to stockpile military equipment in Israel, but only “single-use” armaments that could not be used by the Israel Defense Forces.¹⁴⁰ In 1989, the George H.W. Bush Administration decided to alter the terms of the stockpile and provide Israel access to it in emergency situations.¹⁴¹ At the time, the United States was attempting to sell Saudi Arabia M1A1 tanks, and U.S. officials sought Israel’s acquiescence to the deal.

¹³⁹ “U.S. - Israel Strategic Link: Both Sides Take Stock,” *New York Times*, October 2, 1981.

¹⁴⁰ “U.S. Tells Israel it Plans to Sell Saudis 300 Tanks,” *New York Times*, September 29, 1989.

¹⁴¹ In October 1989, the United States and Israel agreed to pre-position \$100 million worth of dual-use defense equipment in Israel.

Section 514 of the FAA of 1961 (22 U.S.C. §2321h) allows U.S. defense articles stored in war reserve stocks to be transferred to a foreign government through FMS or through grant military assistance, such as FMF. Congress limits the value of assets transferred into War Reserves Stock Allies (WRSA) stockpiles located in foreign countries in any fiscal year through authorizing legislation (**see below**). The U.S. retains title to the WRSA stocks, and title must be transferred before the foreign country may use them.

Until January 2021, the United States European Command (EUCOM) had managed the War Reserves Stock Allies-Israel (WRSA-I) program.¹⁴² Since then, U.S. Central Command (CENTCOM) has managed the program, through which the United States stores missiles, armored vehicles, and artillery ammunition in Israel.¹⁴³ According to one Israeli officer in 2010, “Officially, all of this equipment belongs to the US military.... If however, there is a conflict, the IDF [Israel Defense Forces] can ask for permission to use some of the equipment.”¹⁴⁴ According to one expert, “WRSA-I is a strategic boon to Israel. The process is streamlined: No 60-day congressional notification is required, and there’s no waiting on delivery.”¹⁴⁵ In February 2019, as part of the bilateral military exercise Juniper Falcon 2019, officers from the 405th Army Field Support Brigade simulated a transfer of munitions from the WRSA-I to Israeli Defense Forces control.

Figure 8. Army Officers Inspect WRSA-I



Source: 405th AFSB exercises War Reserve Stocks for Allies transfer, DVIDS, Defense Visual Information Distribution Service, February 28, 2019.

Since 1989, Israel has requested access to the stockpile on at least two occasions, including the following:

- During the summer 2006 war between Israel and Hezbollah, Israel requested that the United States expedite the delivery of precision-guided munitions to Israel. The George W. Bush Administration did not use the emergency authority codified in the AECA, but rather allowed Israel to access the WRSA-I stockpile.
- In July 2014, during Israeli military operations against Hamas in the Gaza Strip, the Defense Department permitted Israel to draw from the stockpile, paid with FMF, to replenish 120-mm tank rounds and 40-mm illumination rounds fired from grenade launchers.¹⁴⁶

¹⁴² In January 2021, right before leaving office, President Trump moved Israel from the area of responsibility (AOR) of EUCOM to that of U.S. Central Command (CENTCOM).

¹⁴³ At present, the United States and Israel have a bilateral agreement that governs the storage, maintenance, in-country transit, and other WRSA-related costs. The government of Israel, using both its national funds and FMF, pays for the construction, maintenance and refurbishment costs of WRSA ammunition storage facilities. It also pays for the packaging, crating, handling and transportation of armaments to and from the stockpile. In any future expedited procedure, reserve stocks managed by EUCOM could be transferred to Israel; then, U.S. officials would create an after-the-fact Foreign Military Sale to account for the transferred equipment.

¹⁴⁴ “US may give Israel Iraq Ammo,” *Jerusalem Post*, February 11, 2010.

¹⁴⁵ “Best Friends Don’t Have to Ask,” *Politico Magazine*, August 14, 2014.

¹⁴⁶ “U.S. Defends Supplying Israel Ammunition during Gaza Conflict,” *Reuters*, July 31, 2014.

The FY2021 Consolidated Appropriations Act extended the authorization of WRSA-I through FY2023.¹⁴⁷

At times, Congress has passed legislation that has authorized the U.S. military to increase the value of materiel stored in Israel. According to DSCA, “It should be understood that no new procurements are involved in establishing and maintaining these stockpiles. Rather, the defense articles used to establish a stockpile and the annual authorized additions represent defense articles that are already within the stocks of the U.S. armed forces. The stockpile authorizing legislation simply identifies a level of value for which a stockpile may be established or increased.”¹⁴⁸

Stockpiling Precision-Guided Munitions for Israel

Since 2014, Israel has requested that the U.S. military increase its stockpile of precision-guided munitions (PGMs) stored in Israel for possible Israeli emergency use against Hezbollah, Hamas, and other terrorist groups. Section 1273 of P.L. 115-232, the John S. McCain National Defense Authorization Act for Fiscal Year 2019, authorized the President to conduct a joint assessment of the quantity and type of PGMs necessary for Israel in the event of a prolonged war.

Section 1275 of P.L. 116-283, the 2021 NDAA, amended Section 514 of the FAA (for a three-year period only) to enable the President to transfer PGMs to Israel without regard to annual limits on their value once they were stored in Israel provided that such a transfer, among other things, does not harm the U.S. supply of PGMs and the combat readiness of the United States. This provision requires the President to certify to Congress that any transfer meets these statutory conditions. It also requires another assessment of the quantity and type of PGMs necessary for Israel in the event of a prolonged war.

If the U.S. military has contributed the maximum amount legally permitted in each applicable fiscal year, then the non-inflation-adjusted value of materiel stored in Israel would currently stand at **\$4 billion**. The following legislation authorized increases in value to the stockpile:

- FY1990: P.L. 101-167, the Foreign Operations, Export Financing, and Related Programs Appropriations Act, 1990, provided \$165 million for all stockpile programs and expanded their locations to include Korea, Thailand, NATO members, and countries which were then major non-NATO allies (Australia, Japan, Korea, Israel, and Egypt). Although the act did not specify funds for Israel, of the \$165 million appropriated, \$10 million was for Thailand, \$55 million was for South Korea, and \$100 million was intended as an initial authorization for Israel.¹⁴⁹
- FY1991: P.L. 101-513, the Foreign Operations, Export Financing, and Related Programs Appropriations Act for FY1991, authorized additions to defense articles in Israel “not less than” \$300 million in value for FY1991.
- FY1993: P.L. 102-391, the Foreign Operations, Export Financing, and Related Programs Appropriations Act for FY1993, authorized additions to defense articles in Israel “not less than” \$200 million in value for FY1993.

¹⁴⁷ The 2021 NDAA, P.L. 116-283, reauthorized WRSA-I through FY2025. However, the House Office of Legislative Counsel ruled that because the FY2021 NDAA had tried to reauthorize WRSA-I for years that were already addressed in law by the FY2021 Omnibus (the Omnibus passed 5 days before the NDAA), the FY2021 NDAA’s reauthorizing amendment on WRSA-I “could not be executed.” See, <https://www.govinfo.gov/content/pkg/COMPS-11978/pdf/COMPS-11978.pdf>.

¹⁴⁸ Defense Institute of Security Assistance Management (DISAM), *DISAM’s Online Greenbook*, Chapter 2, Security Legislation and Policy.

¹⁴⁹ Dr. Louis J. Samelson, “Military Assistance Legislation for Fiscal Year 1990,” *The DISAM Journal*, Winter, 1989/1990.

- FY1994: P.L. 103-87, the Foreign Operations, Export Financing, and Related Programs Appropriations Act for FY1994, authorized additions to defense articles in Israel up to \$200 million in value for FY1994.
- FY1995: P.L. 103-306, the Foreign Operations, Export Financing, and Related Programs Appropriations Act for FY1995, authorized a total addition to defense articles in Israel of \$200 million for FYs 1994 and 1995.
- FY2007-FY2008: Section 13(a)(2)(A)(i) of the Department of State Authorities Act of 2006 (P.L. 109-472) amended Section 514 of the FAA, as amended (P.L. 87-195; 22 U.S.C. §2321h) to authorize additions to defense articles in Israel of up to \$200 million in value for each of FY2007 and FY2008.¹⁵⁰
- FY2011-FY2012: P.L. 111-266, the Security Cooperation Act of 2010, authorized additions to defense articles in Israel up to \$200 million in value for each of FY2011 and FY2012.
- FY2014-FY2015: P.L. 113-296, the United States-Israel Strategic Partnership Act of 2014, authorized additions to defense articles in Israel up to \$200 million in value for each of FY2014 and FY2015.
- FY2016-FY2017: Section 7034(k)(11)(B) of P.L. 114-113, the FY2016 Consolidated Appropriations Act, authorized additions to defense articles in Israel up to \$200 million in value for each of FY2016 and FY2017.
- FY2018-FY2019: Section 7034(l)(7) of P.L. 115-141, the FY2018 Consolidated Appropriations Act, authorized additions to defense articles in Israel up to \$200 million in value for each of FY2018 and FY2019.
- FY2019-FY2020: Section 7048(b)(4)(B) of P.L. 116-6, the FY2019 Consolidated Appropriations Act, authorized additions to defense articles in Israel up to \$200 million in value for each of FY2019 and FY2020.¹⁵¹
- FY2021-FY2023: Section 7035(b)(3) of the FY2021 Consolidated Appropriations Act authorized additions to defense articles in Israel up to \$200 million in value for each of FY2021, FY2022, and FY2023.

Defense Budget Appropriations/Authorization for Anti-Tunnel Defense

In 2016, the Israeli and U.S. governments began collaborating on a new system to detect underground smuggling tunnels and to counter cross-border tunnels used (most prominently by Hamas in the summer 2014 conflict) to infiltrate Israel. Reportedly, this technology uses acoustic or seismic sensors and software to detect digging.¹⁵² This technology may be based on discovery techniques used in the oil and natural gas sector.¹⁵³

¹⁵⁰ This increase for each fiscal year is based on legislative language contained in Section 12002 of P.L. 108-287, the Department of Defense Appropriations Act, 2005.

¹⁵¹ P.L. 116-94, the FY2020 Consolidated Appropriations Act also authorized additions to defense articles in Israel up to \$200 million in value for each of FY2020 and FY2021.

¹⁵² “Israel’s Underground War—Technology and Specialist Troops deployed in face of Subterranean Threat,” *Wall Street Journal*, March 2, 2016.

¹⁵³ “Israeli official bets Advances in anti-tunnel technology will secure Gaza Border,” *Washington Post*, March 6, 2018.

Section 1279 of P.L. 114-92, the FY2016 National Defense Authorization Act, authorized the establishment of a U.S.-Israeli anti-tunnel cooperation program.¹⁵⁴ This authorization allowed funds from the research, development, test, and evaluation defense-wide account to be used (in combination with Israeli funds) to establish anti-tunnel capabilities that detect, map, and neutralize underground tunnels that threaten the United States or Israel. The authorization requires the Secretary of Defense to report to Congress on, among other things, the sharing of research and development costs between the United States and Israel.

Table 6. U.S.-Israeli Anti-Tunnel Cooperation

current U.S. dollars in millions

Fiscal Year	Appropriation
FY2016	40.0
FY2017	42.5
FY2018	47.5
FY2019	47.5
FY2020	-
FY2021	47.5
Total	225.0

Source: Joint Explanatory Statement accompanying Consolidated Appropriations Acts for FY2016-2021. See, – “Combatting Terrorism Technology Support” in Defense Explanatory Statement.

Over the years, the Israel Defense Forces (IDF) have become more adept at detecting tunnels. Reportedly, the Gaza division of the IDF maintains a technology lab for analyzing soil and developing new mapping techniques; units within its engineering corps also possess drilling systems and robotic devices for inspecting tunnels.¹⁵⁵

Defense Budget Appropriations/Authorization for Countering Unmanned Aerial Systems

As unmanned aerial vehicle technology has proliferated across the Middle East, Israel has sought U.S. assistance in countering various systems used by state and non-state actors. In an effort to counter unmanned drones, states are researching various methods to detect incoming unmanned aircraft (using radio or optical sensors) and then either disabling, destroying, or seizing them by jamming their communications, intercepting their flight paths, or hacking their electronic systems.¹⁵⁶ Several Israeli companies have counter-drone solutions in development, including: Drone Dome (Rafael), ReDrone (Elbit Systems), and Drone Guard (Israel Aerospace Industries or IAI). According to one unnamed executive at IAI, “Drone defence is an expensive business as

¹⁵⁴ Section 1279 of P.L. 116-92, the FY2020 National Defense Authorization Act, extended the authority of the anti-tunnel cooperation program through December 31, 2024.

¹⁵⁵ Arie Egozi, “Israelis Test Classified Tunnel Tech to Stymie Terrorists; US Watches,” *Breaking Defense*, August 13, 2019.

¹⁵⁶ Ilan Ben Zion, “As Attack Drones Multiply, Israeli Firms Develop Defenses,” *Associated Press*, September 26, 2019.

countries have a large number of facilities to protect....It's a crazy arms race because the technological possibilities for drone use continue to increase."¹⁵⁷

Congress first authorized a cooperative U.S.-Israeli Counter Unmanned Aerial Systems (C-UAS) program by expanding the scope of the anti-tunnel cooperation program for FY2019.¹⁵⁸ In the FY2020 NDAA (P.L. 116-92), Congress created a separate authority (Section 1278), which authorized the Secretary of Defense to “carry out research, development, test, and evaluation activities, on a joint basis with Israel, to establish capabilities for countering unmanned aerial systems that threaten the United States or Israel.” Section 1278 requires a matching contribution from the government of Israel and caps the annual U.S. contribution at \$25 million. Congress authorized the program through FY2024.

Table 7. U.S.-Israeli Anti-Drone Cooperation
current U.S. dollars in millions

Fiscal Year	Appropriation
FY2020	13.0
FY2021	25.0
Total	38.0

Source: Joint Explanatory Statement accompanying Consolidated Appropriations Acts 2020-2021. See “Combatting Terrorism Technology Support” in Defense Explanatory Statement.

Aid Restrictions and Possible Violations

U.S. aid and arms sales to Israel, like those to other foreign recipients, are subject to U.S. law. Some U.S. citizens and interest groups periodically call upon Congress to ensure that U.S. military assistance to Israel is compliant with applicable U.S. laws and policies and with international humanitarian law.

Arms Sales and Use of U.S.-Supplied Equipment¹⁵⁹

The 1952 Mutual Defense Assistance Agreement and subsequent arms agreements between Israel and the United States limit Israel’s use of U.S. military equipment to defensive purposes.¹⁶⁰ The AECA (22 U.S.C. §2754) authorizes the sale of U.S. defense articles and services for specific purposes, including “legitimate self-defense.”¹⁶¹ The AECA (22 U.S.C. §2753) states that

¹⁵⁷ “Why Drones are Becoming Iran’s Weapons of Choice,” *The Economist*, November 10, 2021.

¹⁵⁸ See Section 1272 of P.L. 115-232, the John S. McCain National Defense Authorization Act for Fiscal Year 2019.

¹⁵⁹ See, CRS In Focus IF11197, *U.S. Arms Sales and Human Rights: Legislative Basis and Frequently Asked Questions*, by Paul K. Kerr and Liana W. Rosen.

¹⁶⁰ U.S. State Department, *Treaties in Force*, Agreement relating to mutual defense assistance, Entered into force July 23, 1952; TIAS 2675.

¹⁶¹ Pursuant to the AECA, when Israel, like other foreign nations, purchases U.S. defense articles and services, it must sign a Letter of Offer and Acceptance (LOA) with the United States government. The LOA lists the items and/or services, estimated costs, and the terms and conditions of sale. Unless otherwise specified, the standard terms and conditions for Israel are consistent with the general terms for all U.S. arms sales abroad. These terms and conditions permit the use of items acquired: for internal security; for legitimate self-defense; for preventing or hindering the proliferation of weapons of mass destruction and of the means of delivering such weapons; to permit the Purchaser to participate in regional or collective arrangements or measures consistent with the Charter of the United Nations, or otherwise to permit the Purchaser to participate in collective measures requested by the United Nations for the purpose

recipients may not use such articles “for purposes other than those for which [they have been] furnished” without prior presidential consent.¹⁶² The act stipulates that sale agreements entered into after November 29, 1999 must grant the U.S. government the right to verify “credible reports” that articles have been used for unauthorized purposes. The FAA of 1961, as amended, also contains general provisions on the use of U.S.-supplied military equipment.¹⁶³

Section 502B of the Foreign Assistance Act

Section 502B(a)(2) of the FAA (22 U.S.C. §2304(a)(2)) stipulates that, absent the exercise of a presidential waiver due to extraordinary circumstances, “no security assistance may be provided to any country the government of which engages in a consistent pattern of gross violations of internationally recognized human rights.”¹⁶⁴

For the purposes of Section 502B, “security assistance” is defined broadly to include sales of defense articles or services, extensions of credits, and guaranties of loans under the AECA, licenses for exports to foreign government military or security forces, and certain categories of assistance authorized under the FAA. The term “gross violations of internationally recognized human rights” is defined to include 1) “torture or cruel, inhuman, or degrading treatment or punishment”; 2) “prolonged detention without charges and trial”; 3) forced disappearance; and 4) “other flagrant denial of the right to life, liberty, or the security of person.” Pursuant to this provision, the executive branch may make a determination that a foreign government has engaged in “a consistent pattern of gross violations of internationally recognized human rights” and is therefore ineligible for security assistance.

Pursuant to Section 502B(c), Congress also may, through a resolution of the House or Senate or by request of SFRC or HFAC, require a report within 30 days from the Secretary of State concerning human rights in a specific country, including an assessment of whether extraordinary circumstances exist that necessitate a continuation of security assistance. After receiving such report, Congress, by joint resolution, may act to terminate, restrict, or continue security assistance to such country. As a general matter, the executive branch appears to have rarely restricted assistance pursuant to this provision. There is no statutory requirement for the executive branch to notify Congress when it chooses to unilaterally invoke 502B. In the 116th Congress, several lawmakers introduced resolutions that, among other things, would have required the Secretary of State to submit a report to Congress pursuant to section 502B(c), including:

- S.Res.409 - A resolution requesting information on Turkey’s human rights practices in Syria pursuant to section 502B(c) of the FAA of 1961;

of maintaining or restoring international peace and security; for the purpose of enabling foreign military forces in less developed countries to construct public works and to engage in other activities helpful to social and economic development; for purposes specified in any Mutual Defense Assistance Agreement between the USG and the Purchaser; or, for purposes specified in any other bilateral or regional defense agreement to which the USG and the Purchaser are both parties. For a sample LOA, see Defense Security Cooperation Agency, Security Assistance Management Manual, available at <https://www.samm.dsca.mil/figure/figure-c5f4>

¹⁶² Nevertheless, in 22 U.S.C. §2753, the AECA also states that the consent of the President shall not be required for the transfer by a foreign country or international organization of defense articles sold by the United States if the recipient is the government of a member country of the North Atlantic Treaty Organization, the Government of Australia, the Government of Japan, the Government of the Republic of Korea, the Government of Israel, or the Government of New Zealand.

¹⁶³ For example, see (among other sections), Section 502B, Human Rights (22 U.S.C. §2304), Section 505, Conditions of Eligibility (22 U.S.C. §2314), and Section 511, Considerations in Furnishing Military Assistance (22 U.S.C. §2321d).

¹⁶⁴ *op.cit.*, CRS In Focus (IF11197).

- S.Res.243 - A resolution requesting information on Saudi Arabia’s human rights practices in Yemen pursuant to section 502B(c) of the FAA of 1961;
- S.Res.754 - A resolution requesting information on the Government of Azerbaijan’s human rights practices pursuant to section 502B(c) of the FAA of 1961; and
- S.Res.169 - A resolution requesting a statement under section 502B(c) of the FAA of 1961 with respect to violations of human rights by the Government of Saudi Arabia.

It is the statutory responsibility of the Departments of State and Defense, pursuant to the AECA, to conduct end-use monitoring (EUM) to ensure that recipients of U.S. defense articles use such items solely for their intended purposes. The AECA also provides authority to the President (through a presidential determination) and Congress (joint resolution) to prohibit the sale or delivery of U.S.-origin defense articles to a recipient country if it has used such articles “for a purpose not authorized” by the AECA or the FAA.¹⁶⁵

Questions over the misuse of U.S.-supplied equipment to Israel have arisen in several instances in past decades, including over the sale of tear gas to Israel during the late 1980s,¹⁶⁶ the sale of Caterpillar D-9 bulldozers to Israel allegedly used in the destruction of Palestinian homes,¹⁶⁷ and Israel’s 2006 use of U.S.-supplied cluster munitions in Lebanon.¹⁶⁸ In 2020 and 2021, some lawmakers wrote a series of letters to the State Department out of concern that Israel may have been using U.S.-origin construction equipment to demolish the homes of Palestinians that Israel has accused of committing terrorism.¹⁶⁹ In House Report language accompanying H.R.4373, the Department of State, Foreign Operations, and Related Programs Appropriations Act, 2022, appropriators urged “the Secretary of State to address in bilateral consultations with Israel the importance of ensuring that MOU-supported equipment is not used in any way that undermines the prospects of a negotiated two-state solution.”¹⁷⁰

¹⁶⁵ See CRS In Focus IF11533, *Modifying or Ending Sales of U.S.-Origin Defense Articles*, by Paul K. Kerr and Liana W. Rosen, and CRS In Focus IF10392, *Foreign Military Sales Congressional Review Process*, by Paul K. Kerr.

¹⁶⁶ See Government Accountability Office, *Israel: Use of U.S.-Manufactured Tear Gas in the Occupied Territories*, NSIAD-89-128, April 13, 1989.

¹⁶⁷ *CORRIE v. CATERPILLAR INC*, United States Court of Appeals, Ninth Circuit, filed March 15, 2005.

¹⁶⁸ See, U.S. Department of State, “U.S. Cluster Munitions Policy,” Stephen D. Mull, Acting Assistant Secretary for Political-Military Affairs, On-the-Record Briefing, May 21, 2008.

¹⁶⁹ Posted on Twitter by Congresswoman Rashida Tlaib, March 12, 2021, 2:14pm.

¹⁷⁰ H.Rept. 117-84, State, Foreign Operations, and Related Programs Appropriations Bill, 2022.

Some Congressional Opposition to Sale of PGMs to Israel

During the May 2021 conflict in Gaza, some Members critical of Israel's conduct during the hostilities sought to block a proposed sale of precision-guided munitions (PGMs) to Israel. On May 5, 2021, five days before the start of hostilities, the State Department formally notified SFRC and HFAC of a proposed \$735 million Direct Commercial Sale (DCS) of Joint Direct Attack Munition (JDAM) kits and Small Diameter Bombs (SDBs) manufactured by Boeing to Israel. On May 20, Senator Bernie Sanders and Representatives Alexandria Ocasio-Cortez, Mark Pocan, and Rashida Tlaib introduced respective resolutions (S.J.Res.19 and H.J.Res.49) of disapproval against the proposed sale of munitions.¹⁷¹ The resolutions did not receive a vote in either chamber and, on May 21, the Biden Administration approved an export license for the sale. Senator Sanders reportedly then placed a hold on all State Department nominees, but lifted it soon after the State Department pledged additional humanitarian aid for the Palestinians.¹⁷² After the State Department issued the license, Secretary Blinken stated in a televised interview that: "When it comes to arms sales, two things. First, the President's been equally clear: We are committed to giving Israel the means to defend itself, especially when it comes to these indiscriminate rocket attacks against civilians. Any country would respond to that, and we – we're committed to Israel's defense. At the same time, any arms sale is going to be done in full consultation with Congress. We're committed to that. And we want to make sure that that process works effectively."¹⁷³

Human Rights Vetting (Leahy Law)¹⁷⁴

Section 620M of the FAA of 1961, as amended, prohibits the furnishing of assistance authorized by the FAA and the AECA to any foreign security force unit where there is credible information that the unit has committed a gross violation of human rights. The State Department and U.S. embassies overseas implement Leahy vetting to determine which foreign security individuals and units are eligible to receive U.S. assistance or training.

In February 2016, Senator Leahy and 10 other Members of Congress sent a letter to then-Secretary of State John Kerry asking the State Department to determine whether alleged extrajudicial killings or torture by Israeli military and police (and Egypt separately) should trigger Leahy law restrictions.¹⁷⁵ In its response to Congress, the State Department stated that no Israeli individual or unit potentially involved in the letter's alleged incidents had been submitted to receive U.S. assistance.¹⁷⁶

¹⁷¹ During House consideration of H.R. 4350, the National Defense Authorization Act for Fiscal Year 2022, several lawmakers proposed an amendment to suspend the "transfer of Boeing Joint Direct Attack Munition weaponry under the \$735 million direct commercial sale to the Israeli government." The House did not include this amendment in its final bill. See House Committee on Rules, H.R. 4350 - National Defense Authorization Act for Fiscal Year 2022.

¹⁷² Jeff Abramson, "U.S. Arms Sales to Israel Challenged," *Arms Control Today*, June 2021.

¹⁷³ U.S. State Department, Secretary Antony J. Blinken on ABC's This Week with George Stephanopoulos, May 23, 2021.

¹⁷⁴ For background on the Leahy Law, see CRS Report R43361, "Leahy Law" Human Rights Provisions and Security Assistance: Issue Overview, coordinated by Nina M. Serafino.

¹⁷⁵ The letter's text is available at <http://www.politico.com/f/?id=00000153-c56c-d662-a75b-cfecc6be0000>.

¹⁷⁶ See the text of then Assistant Secretary of State for Legislative Affairs Julia Frifield's April 18, 2016, response letter to Representative Henry C. Johnson at <http://www.politico.com/f/?id=00000154-7c2f-d905-a357-7c7f04750000>.

H.R. 2590, the Defending the Human Rights of Palestinian Children and Families Living Under Israeli Military Occupation Act

For the third consecutive Congress, Representative Betty McCollum has introduced legislation focused on Israel's treatment of the Palestinians.¹⁷⁷ In addition to its findings, sense of Congress, and statement of administration policy sections, as well as other directives, H.R. 2590 contains a section (Section 5) entitled, "Limitation on Assistance." It contains the following provisions:

Section 5(a) – "Notwithstanding any other provision of law," this section would prohibit foreign assistance funds to the Government of Israel for, among other things, (1) "Supporting the military detention, interrogation, abuse, or ill-treatment of Palestinian children," (2) "Supporting the seizure, appropriation, or destruction of Palestinian property and forcible transfer of civilians in the Israeli-controlled and occupied West Bank," and (3) "Deploying, or supporting the deployment of personnel, training, services, lethal materials, equipment, facilities, logistics, transportation, or any other activity to territory in the occupied West Bank to facilitate or support further unilateral annexation by Israel."

Section 5(b) – This section would require the Secretary of State to make an initial certification to Congress, followed by a regular annual one, that no U.S. assistance from the previous fiscal year has been used by Israel to support "personnel, training, lethal materials, equipment, facilities, logistics, transportation, or any other activity that supports or is associated with any of the activities" prohibited in Section 5(a). Or, the Secretary could certify that U.S. assistance funds from the previous fiscal year were used for a prohibited activity (as specified in Section 5(a)), in which case the Secretary must accompany the certification with a report to Congress describing "in detail the amount of such funds used by the Government of Israel in violation of such subsection and each activity supported by such funds."

Use of U.S. Funds within Israel's Pre-June 1967 Borders

In some instances, U.S. assistance to Israel may be used only in areas subject to the administration of Israel prior to June 1967 (see "**Loan Guarantees**"). For example, U.S. State Department-provided MRA assistance (see "**Migration & Refugee Assistance**"), per agreement between the State Department and United Israel Appeal, may only be used for absorption centers, *ulpanim* (intensive Hebrew-language schools with particular focus on immigrants to Israel), or youth *aliyah* (relocation to Israel) institutions located within Israel's pre-June 1967 area of control.¹⁷⁸

Until recently, no program funded by the endowments of U.S.-Israeli binational foundations (see "**U.S.-Israeli Scientific & Business Cooperation**") could be "conducted in geographic areas which came under the administration of the Government of Israel after June 5, 1967, and may not

¹⁷⁷ In the 115th Congress, Representative McCollum introduced H.R. 4391, Promoting Human Rights by Ending Israeli Military Detention of Palestinian Children Act, that would have, among other things, prohibited U.S. assistance to Israel (notwithstanding any other provision of law) from being used to support the military detention, interrogation, or ill-treatment of Palestinian children in violation of international humanitarian law. This bill was referred to the House Foreign Affairs Committee, and it did not see further committee or floor action. In the 116th Congress, Representative McCollum introduced a similar version of the legislation (H.R. 2407), that, rather than specifically addressing U.S. military assistance to Israel, would have altered Section 620M of the Foreign Assistance Act of 1961 (22 U.S.C. §2378d; commonly known as the "Leahy Law") by prohibiting foreign assistance to a foreign country that may be used to support the military detention, interrogation, abuse, or ill-treatment of children in violation of international humanitarian law. H.R. 2407 also would have authorized \$19 million each year for nongovernmental organizations monitoring possible human rights abuses associated with reported Israeli military detention of Palestinian children. This bill also was referred to the House Foreign Affairs Committee, and it did not see further committee or floor action.

¹⁷⁸ This stipulation is found in grant agreements between the U.S. State Department's Bureau of Population, Refugees, and Migration (PRM) and United Israel Appeal (clause 8. F. 2—Use in Territories Subject to the Administration of the State of Israel Prior to June 1967). The FY2013 agreement (S-PRMCO-13-GR-1041—March 13, 2013) is for \$15 million. CRS Correspondence with U.S. State Department, March 2014.

relate to subjects primarily pertinent to such areas.”¹⁷⁹ In October 2020, the Trump Administration announced that it had removed geographic restrictions from the founding agreements establishing the three main U.S.-Israeli binational foundations (BIRD, BARD, BSF), thereby permitting universities in the West Bank to apply for grant funding.¹⁸⁰ According to an October 2020 press statement released by the U.S. Embassy in Israel:

Upon entry of force of the Protocol signed here in Judea and Samaria, more Israeli partners will be eligible to receive funding for scientific collaboration in a wide variety of fields....Established in the 1970s, the BIRD, BARD, and BSF Agreements for each of the three Foundations have not permitted support for projects conducted in areas that came under the administration of the Government of Israel after June 5, 1967. These geographic restrictions are no longer consistent with U.S. policy following (i) the Administration’s opposition to the provisions of United Nations Security Council Resolution 2334, (ii) the Administration’s recognition of Jerusalem as Israel’s capital and moving the U.S. Embassy from Tel Aviv to Jerusalem, (iii) the Administration’s recognition of Israel’s sovereignty over the Golan Heights, and (iv) the Administration’s announcement that the U.S. will no longer consider that the establishment of civilian settlements in the West Bank is per se inconsistent with international law.... Updating the Agreements further strengthens the special bilateral relationship between the United States and Israel and continues efforts to generate significant mutual scientific and economic benefits.¹⁸¹

In the 117th Congress, Section 5 of H.R.5344, the Two-State Solution Act, would, among other things, restrict the United States government from providing “support for projects conducted in geographic areas which came under the administration of the Government of Israel after June 5, 1967...”

Israeli Arms Transfers to Third Parties

Per Section 3(a) of the AECA (22 U.S.C. §2753) and Section 505(e) of the FAA (22 U.S.C. §2314), the U.S. government must review and approve any transfer of U.S.-origin equipment from a recipient to a third party that was not previously authorized in the original acquisition.¹⁸² Third Party Transfer (or TPT) is the retransfer of title, physical possession or control of defense articles from the authorized recipient to any person or organization not an employee, officer or agent of that recipient country.¹⁸³

As previously mentioned, Israel is a major global manufacturer of armaments. Yet, it also possesses significant quantities of major U.S.-origin defense equipment stemming from its decades-old security partnership with the United States. At times, third parties have sought to procure U.S. equipment held by Israel, and U.S.-Israel differences over approval of retransfer has at times caused friction in the bilateral relationship. For example, in 2017, Croatia solicited bids for the procurement of fighter aircraft and, a year later, chose to purchase 12 used F-16 Barak

¹⁷⁹ See “Regulations” document at <http://www.bsf.org.il/BSFPublic/DefaultPage1.aspx?PageId=221&innerTextID=221>.

¹⁸⁰ Noa Landau, Hagar Shezaf, and Shira Kadari-Ovadia, “Netanyahu, Ambassador Friedman Ink Deal Expanding Scientific Cooperation to Settlements,” *Ha’aretz*, October 28, 2020.

¹⁸¹ U.S. State Department, U.S., Israel Expand Reach of Binational Foundations and Establish New Scientific and Technological Cooperation Agreement, U.S. Embassy Jerusalem, Press Release, October 28, 2020.

¹⁸² See, U.S. State Department, “Third Party Transfer Process and Documentation,” Bureau of Political-Military Affairs, December 17, 2018.

¹⁸³ See, Defense Institute of Security Cooperation Studies, “The Management of Security Cooperation (Green Book),” Edition 39, January 2019.

fighters from Israel in a deal worth an estimated \$500 million, conditioned on U.S. TPT approval. In December 2018, the Trump Administration notified Congress that it had approved the sale, but only if all Israeli modifications were removed beforehand. Reportedly, Croatia did not want the F-16s returned to their original condition, and the deal was cancelled despite high-level negotiations between Israeli and U.S. officials.¹⁸⁴

Israel and China

Amidst ongoing global U.S.-Chinese competition in various fields, Israel's defense and technology trade with China has at times come under U.S. scrutiny.¹⁸⁵ Since the middle of the last decade, Israeli defense exports to China have nearly ceased. Two planned Israeli sales to China drew significant opposition both from successive Administrations and from Congress (PHALCON airborne radar systems in 2000 and upgrade of Chinese Harpy Killer drone aircraft in 2004/2005).¹⁸⁶ Apparently as a result of U.S. pressure on Israel to cease its long-standing and sometimes clandestine defense relationship with China, Israel created its own arms export control agency, known as the Defense Export Control Agency (DECA – **see textbox above**). In addition, the United States and Israel signed a 2005 bilateral agreement, known as the “Declaration of Understanding on Technology Exports,” whereby both countries pledged to ensure defense export transparency, with the United States pledging not to ban Israel's defense deals on commercial grounds to ensure Israeli competitiveness globally.¹⁸⁷

Though official Israeli-Chinese defense ties have essentially ended,¹⁸⁸ China is now Israel's second largest single-state trading partner (after the United States), and there is still some concern that Israeli technology transfer in the commercial sphere will be used by China to compete with the United States and potentially threaten its national security in various fields, such as cybersecurity, artificial intelligence, and robotics.¹⁸⁹ According to one analyst in 2018, “Since they cannot buy defense equipment from Israel, Chinese companies with links to the country's military have looked to civilian technologies instead, particularly those adaptable to military use.”¹⁹⁰ Partly due to U.S. concerns regarding China's involvement in Israel's economy, Israel created an advisory panel on foreign investment in Israel in late 2019.¹⁹¹ However, this panel

¹⁸⁴ “Croatia cancels F-16 Deal with Israel due to U.S. Objections,” *Axios*, January 10, 2019.

¹⁸⁵ See, “The Evolving Israel-China Relationship,” *RAND Corporation*, 2019.

¹⁸⁶ Representative Sonny Callahan of Alabama, then Chairman of the Foreign Operations Subcommittee of the House Appropriations Committee, told a hearing on April 6, 2000, that he would block \$250 million in FY2001 military assistance to Israel unless Israel cancelled the PHALCON sale to China. Representative Callahan offered an amendment during a June 20 subcommittee markup to withhold \$250 million from the \$2.88 billion in total economic and military assistance proposed for Israel for FY2001, but the amendment failed by a vote of nine to six. See, “Israel-China Radar Deal Opposed,” *Washington Post*, April 7, 2000 and “U.S. Congressman: We’ll Block Israeli Aid Unless China Deal Cancelled,” *Jerusalem Post*, April 7, 2000.

¹⁸⁷ “Israel, U.S. Draft Agreement for Openness, Equality in Arms Deals,” *Ha’aretz*, June 27, 2005.

¹⁸⁸ In late 2021, three Israeli companies and 10 suspects were indicted on charges of exporting cruise missiles to China without a permit. According to one report, “Israel is home to some 1,600 licensed arms exporters, which employ 150,000 to 200,000 people. In addition, there is a large supply chain of subcontractors who supply software, hardware, raw materials, and other goods necessary for arms production. DECA is supposed to watch over this massive system, guided by strict rules governing Israel's arms export industry. The body, which operates with nearly no transparency, is supposed to vet deals to ensure that arms do not go to enemy countries, endanger Israel in any way, include classified technology, or stand to harm Israel's international standing.” See, “10 Israelis set to be Indicted for Illegally Exporting Missiles to China,” *Times of Israel*, December 20, 2021.

¹⁸⁹ “China Tech Push in Israel Stirs Security Fears,” *Wall Street Journal*, February 12, 2019.

¹⁹⁰ “Israel and China Take a Leap Forward—but to Where?” *Mosaic*, November 5, 2018.

¹⁹¹ Arie Egozi, “Israelis Create Foreign Investment Overseer; China Targeted,” *Breaking Defense*, November 13, 2019.

reportedly does not have the authority to review investments in sectors such as high-tech that accounted for most of China's investments in Israel in the previous decade.¹⁹²

Both successive Administrations and Congress have urged Israel to do more to limit Chinese investment. Section 1289 of P.L. 116-92, the National Defense Authorization Act for FY2020, expressed a sense of the Senate that the United States government should “urge the Government of Israel to consider the security implications of foreign investment in Israel.” According to one Israeli analysis, President Trump reportedly warned Prime Minister Netanyahu in March 2019 that U.S. security assistance for and cooperation with Israel could be limited if Chinese companies establish a 5G communications network in Israel, in line with similar warnings that the Administration had communicated to other U.S. allies and partners.¹⁹³ In spring 2020, after the United States again raised concern over Chinese investment in major Israeli projects, the subsidiary of a Hong Kong-based company lost a bid to build Israel's largest desalination plant. Shortly before Israel announced the bid decision, then Secretary of State Michael Pompeo visited Israel and publicly stated, “We do not want the Chinese Communist Party to have access to Israeli infrastructure, Israeli communication systems, all of the things that put Israeli citizens at risk and in turn put the capacity for America to work alongside Israel on important projects at risk as well.”¹⁹⁴

The Biden Administration also has continued to warn regional partners about Chinese investment in critical infrastructure. According to Mira Resnick, Deputy Assistant Secretary for Regional Security at the Bureau of Political-Military Affairs, U.S. Department of State, “We know our partners and allies in the Middle East have trade relations with China and that's OK, but we made it clear that there is a certain kind of cooperation with China we cannot live with.”¹⁹⁵

State-owned and private Chinese companies continue to do business in Israel. A state-owned Chinese company (the Shanghai International Port Group) began operating the new terminal at Haifa's seaport for 25 years. Another state-owned Chinese company (a subsidiary of China Harbour Engineering Company) is developing Ashdod's new port. Both Haifa and Ashdod host Israeli naval bases. Due to the Chinese contract for Haifa, the Biden Administration has reportedly pressed Israeli counterparts to regularly check heavy machinery at the port for technology that could be employed to spy on the nearby naval base.¹⁹⁶ The China Civil Engineering Construction Company has helped build several road tunnels and is working on the construction of Tel Aviv's Light Rail project.

In 2022, after repeated high level U.S. engagement with Israel on China, Israel has reportedly agreed to “update Washington about any major deals with Beijing, especially in infrastructure and technology” and “would reconsider any such deals at America's request.”¹⁹⁷ In early 2022, Israel

¹⁹² Shira Efron, et al., *Chinese Investment in Israeli Technology and Infrastructure: Security Implications for Israel and the United States*, RAND Corporation, 2020, pp. 24-25.

¹⁹³ Hiddai Segev, Doron Ella, and Assaf Orion, “My Way or the Huawei? The United States-China Race for 5G Dominance,” *Institute for National Security Studies*, Insight No. 1193, July 15, 2019.

¹⁹⁴ Shirley Zhao and Ivan Levingston, “Li Ka-Shing Hong Kong Group Loses Israel Deal amid U.S. Push,” *Bloomberg*, May 26, 2020.

¹⁹⁵ Barak Ravid, “CIA Director Raised China Concerns with Israeli Prime Minister,” *Axios.com*, August 18, 2021.

¹⁹⁶ Arie Egozi, “US Presses Israel on Haifa Port amid China Espionage Concerns: Sources,” *Breaking Defense*, October 5, 2021.

¹⁹⁷ Lahav Harkov, “Israel Agrees to Update US about China Trade to Avoid Tension,” *Jerusalem Post*, January 3, 2022.

chose other foreign companies over Chinese bidders for the next phase of Tel Aviv's light rail construction.

Other Ongoing Assistance and Cooperative Programs

Migration & Refugee Assistance

Since 1973, Israel has received a total of approximately **\$1.68 billion** in grants from the State Department's Migration and Refugee Assistance account (MRA) to assist in the resettlement of migrants to Israel.¹⁹⁸ Funds are paid to the United Israel Appeal, a private philanthropic organization in the United States, which in turn transfers the funds to the Jewish Agency for Israel.¹⁹⁹ Between 1973 and 1991, the United States gave about \$460 million for resettling Jewish refugees in Israel. During the 1990s, after the collapse of the Soviet Union and the resettlement of hundreds of thousands of Jewish immigrants in Israel, MRA grants to Israel increased to almost \$80 million per year from 1992 to 1999 (\$630 million). Since then, annual grants have decreased based at least partly on the declining number of Jews leaving the former Soviet Union and other areas for Israel (see **Table 8**).

Table 8. Migration and Refugee Assistance Funding Levels for Israel

Fiscal Year	Total
FY2000-FY2012	\$519.3 million
FY2013	\$15 million
FY2014	\$15 million
FY2015	\$10 million
FY2016	\$10 million
FY2017	\$7.5 million
FY2018	\$7.5 million
FY2019	\$5.0 million
FY2020	\$5.0 million
FY2021	\$5.0 million
Total	\$599.3 million

Source: U.S. State Department.

Congress has changed the earmark language since the first refugee resettlement funds were appropriated in 1973. At first, the congressional language said the funds were for "resettlement in Israel of refugees from the Union of Soviet Socialist Republics and from Communist countries in Eastern Europe." But starting in 1985, the language was simplified to "refugees resettling in Israel" to ensure that Ethiopian Jews would be covered by the funding. Technically, the legislative language designates funds for refugee resettlement, but in Israel little differentiation is made

¹⁹⁸ The MRA account is authorized by 22 U.S.C. § 2601. Funding for the account comes from appropriations in the foreign operations appropriations bill.

¹⁹⁹ The Jewish Agency for Israel's website is available at <http://www.jafi.org.il/>.

between Jewish “refugees” and other Jewish immigrants, and the funds are used to support the absorption of all Jewish immigrants.

Loan Guarantees

Overview

Since 1972, the United States has extended loan guarantees to Israel to assist with housing shortages, Israel’s absorption of new immigrants from the former Soviet Union and Ethiopia, and its economic recovery following the 2000-2003 recession, which was probably caused in part by the Israeli-Palestinian conflict known as the second intifada. Loan guarantees are a form of indirect U.S. assistance to Israel; they enable Israel to borrow from commercial sources at lower rates. Congress directs that subsidies be set aside in a U.S. Treasury account in case of a possible Israeli default. These subsidies, which are a percentage of the total loan (based in part on the credit rating of the borrowing country), have come from the U.S. or the Israeli government. Israel has never defaulted on a U.S.-backed loan guarantee.

Loan Guarantees for Economic Recovery

In 2003, then-Prime Minister Ariel Sharon requested an additional \$8 billion in loan guarantees to help the Israeli government stimulate Israel’s then-ailing economy. The loan guarantee request accompanied a request for an additional \$4 billion in military grants to help Israel prepare for possible attacks during an anticipated U.S. war with Iraq. P.L. 108-11, the FY2003 Emergency Wartime Supplemental Appropriations Act, authorized \$9 billion in loan guarantees over three years for Israel’s economic recovery and \$1 billion in military grants. P.L. 108-11 stated that the proceeds from the loan guarantees could be used only within Israel’s pre-June 5, 1967, area of control; that the annual loan guarantees could be reduced by an amount equal to the amount Israel spends on settlements outside of Israel’s pre-June 1967 area of control; that Israel would pay all fees and subsidies; and that the President would consider Israel’s economic reforms when determining terms and conditions for the loan guarantees.²⁰⁰

On November 26, 2003, the Department of State announced that the \$3 billion in loan guarantees for FY2003 were reduced by \$289.5 million because Israel continued to build settlements in the occupied territories and continued construction of a security barrier separating key Israeli and Palestinian population centers.²⁰¹ In FY2005, the U.S. government reduced the amount available for Israel to borrow by an additional \$795.8 million. Since then, Israel has not borrowed any funds.

According to the U.S. Department of the Treasury, Israel is legally obligated to use the proceeds of guaranteed loans for refinancing its government debt and also has agreed that proceeds shall

²⁰⁰ According to P.L. 108-11, “[Loan] guarantees may be issued under this section only to support activities in the geographic areas which were subject to the administration of the Government of Israel before June 5, 1967: *Provided further*, That the amount of guarantees that may be issued shall be reduced by an amount equal to the amount extended or estimated to have been extended by the Government of Israel during the period from March 1, 2003, to the date of issue of the guarantee, for activities which the President determines are inconsistent with the objectives and understandings reached between the United States and the Government of Israel regarding the implementation of the loan guarantee program: *Provided further*, That the President shall submit a report to Congress no later than September 30 of each fiscal year during the pendency of the program specifying the amount calculated under the preceding proviso and that will be deducted from the amount of guarantees authorized to be issued in the next fiscal year.”

²⁰¹ U.S. State Department, “Boucher cites Concerns over Settlement Building and Security Fence Route,” State Department Press Releases And Documents, November 26, 2003.

not be used for military purposes or to support activities in areas outside its pre-June 5, 1967, areas of control (the West Bank—including East Jerusalem), the Gaza Strip, and the Golan Heights). However, U.S. officials in 2009 noted that because Israel’s national budget is fungible, proceeds from the issuance of U.S.-guaranteed debt that are used to refinance Israeli government debt free up domestic Israeli funds for other uses.²⁰²

As of 2021, Israel had issued \$4.1 billion in U.S.-backed bonds.²⁰³ After deducting the amounts mentioned above, Israel might still be authorized to issue up to \$3.814 billion in U.S.-backed bonds. However, if the Israeli government sought to issue new U.S.-backed bonds, it is unclear whether the loan guarantees available to Israel might be subject to reduction based on Israel’s estimated cumulative subsequent expenditures for settlements in the West Bank. The original loan guarantee program authorization for Israel was through FY2005. Since then, Congress has extended the program five times.²⁰⁴ The program is currently authorized through the end of FY2023.

In general, Israel may view U.S. loan guarantees as a “last resort” option, which its treasury could use if unguaranteed local and international bond issuances become too expensive. According to one Israeli official in 2012, “We consider the loan guarantees as preparation for a rainy day.... This is a safety net for war, natural disaster and economic crisis, which allows Israel to maintain economic stability in unstable surroundings.”²⁰⁵ Israeli officials may believe that although they have not used the loan guarantees in the last 17 years, maintaining the program boosts the country’s fiscal standing among international creditors in capital markets.

²⁰² CRS correspondence with the U.S. Department of the Treasury’s Office of International Affairs, October 2009.

²⁰³ This includes \$1.6 billion in FY2003; \$1.75 billion in FY2004; and \$750 million in FY2005.

²⁰⁴ P.L. 108-447, the FY2005 Consolidated Appropriations Act, first extended the authority of the loan guarantees from FY2005 to FY2007. P.L. 109-472, the 2006 Department of State Authorities Act, extended the authority to provide loan guarantees through FY2011. Under that legislation, the loan guarantee program had a stated end of September 30, 2011; however, there was also a “carryover” provision in the statute under which Israel could draw on unused U.S. guarantees until September 30, 2012. In the summer of 2012, Congress passed and the President signed into law P.L. 112-150, the United States-Israel Enhanced Security Cooperation Act of 2012. Section 5(b) of the law extended the loan guarantee authority until September 30, 2015. Section 7034(k)(10) of P.L. 114-113, the FY2016 Consolidated Appropriations Act, further extended the program until September 30, 2019, allowing unused amounts to be carried over into FY2020. P.L. 116-6, the FY2019 Consolidated Appropriations Act, further extended the program until September 30, 2023, allowing unused amounts to be carried over into FY2024.

²⁰⁵ “U.S. to Grant Three-year Extension of Loan Guarantees to Israel,” *Ha’aretz*, January 24, 2012.

Table 9. U.S. Loan Guarantees to Israel: FY2003-FY2021
current U.S. dollars in millions

Fiscal Year	Deductions for Settlement Activity	Amount Borrowed by Israel	Amount Available for Israel to Borrow
FY2003	289.5	1,600.0	1,110.5
FY2004	—	1,750.0	1,250.0
FY2005	795.8	750.0	1,454.2
FY2006	—	—	3,814.7
FY2007	—	—	3,814.7
FY2008	—	—	3,814.7
FY2009	—	—	3,814.7
FY2010	—	—	3,814.7
FY2011	—	—	3,814.7
FY2012	—	—	3,814.7
FY2013	—	—	3,814.7
FY2014	—	—	3,814.7
FY2015	—	—	3,814.7
FY2016	—	—	3,814.7
FY2017	—	—	3,814.7
FY2018	—	—	3,814.7
FY2019	—	—	3,814.7
FY2020	—	—	3,814.7
FY2021	—	—	3,814.7

Source: U.S. Department of the Treasury and U.S. State Department.

Note: For FY2003-FY2005, the U.S. Department of the Treasury authorized Israel to borrow up to \$3 billion per year of the total \$9 billion authorized for the Loan Guarantee program.

American Schools and Hospitals Abroad Program (ASHA)²⁰⁶

Through Foreign Operations appropriations bills, Congress has funded the ASHA program as part of the overall Development Assistance (DA) appropriation to the United States Agency for International Development (USAID). According to USAID, ASHA is designed to strengthen self-sustaining schools, libraries, and medical centers that best demonstrate American ideals and practices abroad. ASHA has been providing support to institutions in the Middle East since 1957, and a number of universities and hospitals in Israel have been recipients of ASHA grants. Institutions based in Israel combined receive \$2 to \$4 million annually in ASHA grants. In FY2020, (the most recent year for which data are available), ASHA grant recipients in Israel/West Bank included American Committee for Shaare Zedek Hospital in Jerusalem, American Friends of the Episcopal Diocese of Jerusalem, Hadassah - The Women's Zionist Organization of America, and Trustees of the Feinberg Graduate School. According to USAID, institutions based in Israel have received the most program funding in the Middle East region.

²⁰⁶ According to USAID, recipients of ASHA grants on behalf of overseas institutions must be private U.S. organizations, headquartered in the United States, and tax-exempt. The U.S. organization must also serve as the founder and/or sponsor of the overseas institution. Schools must be for secondary or higher education and hospital centers must conduct medical education and research outside the United States. Grants are made to U.S. sponsors for the exclusive benefit of institutions abroad. See http://www.usaid.gov/our_work/cross-cutting_programs/asha/.

U.S.-Israeli Scientific & Business Cooperation

In the early 1970s, Israeli academics and businessmen began looking for ways to expand investment in Israel's nascent technology sector. The sector, which would later become the driving force in the country's economy, was in need of private capital for research and development at the time. The United States and Israel launched several programs to stimulate Israeli industrial and scientific research, and Congress has on several occasions authorized and appropriated funds for this purpose to the following organizations:²⁰⁷

- **The BIRD Foundation** (Israel-U.S. Binational Research & Development Foundation).²⁰⁸ BIRD, which was established in 1977, provides matchmaking services between Israeli and American companies in research and development with the goal of expanding cooperation between U.S. and Israeli private high-tech industries. The mission of the Foundation is “to stimulate, promote and support joint (nondefense) industrial R&D of mutual benefit to...” the two countries.²⁰⁹ Projects are supported in the areas of homeland security, communications, electronics, electro-optics, software, life sciences, and renewable and alternative energy, among others.²¹⁰ According to the Foundation, \$372 million in grants have been awarded to 1,018 projects. Awards typically range from \$700,000 to \$900,000. The award size varies based on total project budget and other considerations. The recipients must provide at least 50% of the total project budget.
- **The BSF Foundation** (U.S.-Israel Binational Science Foundation).²¹¹ BSF, which was started in 1972, promotes cooperation in scientific and technological research. Since 2012, BSF has partnered with the National Science Foundation (NSF) to jointly fund collaborative U.S.-Israeli scientific research. In August 2019, Israel's Council of Research announced that it would provide \$56 million over a five-year period to expand the BSF-NSF program.
- **The BARD Foundation** (Binational Agriculture and Research and Development Fund). BARD was created in 1978²¹² and supports U.S.-Israeli cooperation in agricultural research.²¹³ Since then, it has disbursed \$315 million in grants

²⁰⁷ With the exception of recent funding for U.S.-Israeli energy cooperation (see “U.S.-Israeli Energy Cooperation” section below), Congress has not appropriated funding for binational foundations since the mid-1980s. At this point, the foundations are able to sustain grant making with interest earned from their respective endowments and fees (repayments) collected from companies who successfully profited after receiving research support from the foundations. Since its founding, BIRD has received \$113 million in fees from 470 companies.

²⁰⁸ See <http://www.birdf.com/default.asp>. Congress helped establish BIRD's endowment with appropriations of \$30 million and \$15 million in 1977 (P.L. 95-26) and 1985 (P.L. 98-473), respectively. These grants were matched by the Israeli government for a total endowment of \$90 million.

²⁰⁹ Eitan Ydilevich, “Building U.S.-Israel Economic Partnerships, The BIRD Model,” Washington, DC., June 10, 2010, p. 2.

²¹⁰ BIRD Foundation, What is BIRD?, available at <http://www.birdf.com/Index.asp?CategoryID=22&ArticleID=79>.

²¹¹ See, <http://www.bsf.org.il/Gateway4/>. In 1972 and 1984, the United States and Israel contributed a total of \$100 million (\$50 million each) for BSF's endowment. The U.S. share (\$50 million) first came in 1972 in the form of a \$30 million accelerated Israeli repayment of earlier food aid debt to the United States. A second tranche followed in 1984 with \$20 million congressional appropriation (P.L. 98-473). According to the treaty establishing the Foundation, the Foundation shall use the interest, as well as any funds derived from its activities, for the operations of the Foundation.

²¹² Congress originally authorized BARD in Section 1458(e) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. §3291(e)).

²¹³ See <http://www.bard-isus.com/>. Congress helped establish BARD's endowment with appropriations of \$40 million

(typically three-year, \$310,000 grants) for over 1,330 projects.²¹⁴ In the 115th Congress, P.L. 115-334 amended the original 1977 authorization of binational agricultural cooperation by adding that BARD should promote research in “drip irrigation, pesticides, aquaculture, livestock, poultry, disease control, and farm equipment.” In 2018, BARD signed a cooperative agreement with The National Institute of Food and Agriculture. Congress has encouraged cooperation between those two entities.²¹⁵

- In 1995, the United States and Israel established **The U.S.-Israel Science and Technology Foundation (USISTF)** to fund and administer projects mandated by the U.S.-Israel Science and Technology Commission (USISTC),²¹⁶ a bilateral entity jointly established by the United States Department of Commerce and the Israel Ministry of Industry, Trade, and Labor in 1994 to foster scientific, technological, and economic cooperation between the two countries.

Since 2007, Congress has repeatedly authorized and appropriated funds for the creation of new U.S.-Israeli cooperative programs in various fields. Most of these new programs fall under the administrative purview of the BIRD Foundation. They include the following:

U.S.-Israeli Energy Cooperation (BIRD Energy)

BIRD Energy is a cooperative program between the U.S. Department of Energy and the Israeli Ministry of Energy designed to further research in renewable energy and energy efficiency. It is nominally part of the BIRD Foundation. Congress authorized the creation of the program in Section 917 of P.L. 110-140, the Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007.²¹⁷ Although the law did not appropriate any funds for joint research and development, it did establish a grant program to support research, development, and commercialization of renewable energy or energy efficiency. The law also authorized the Secretary of Energy to provide funds for the grant program as needed. Congress authorized the program for seven years from the time of enactment, which was on December 19, 2007. Then, in December 2014, the President signed into law P.L. 113-296, the United States-Israel Strategic Partnership Act of 2014, which reauthorized the U.S.-Israeli Energy Cooperation program for an additional 10 years until September 30, 2024.

and \$15 million in 1979 (P.L. 95-481) and 1985 (P.L. 98-473), respectively. These grants were matched by the State of Israel for a total endowment of \$110 million. In recent years, Congress has provided funds for BARD in annual Agriculture Appropriations legislation at approximately \$500,000 a year.

²¹⁴ Shoshanna Solomon, “20 Agriculture Projects of US-Israel Fund Added \$3 Billion to Economies,” *Times of Israel*, November 16, 2020.

²¹⁵ See, the Explanatory Statement for Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Bill, 2021, accompanying the FY2021 Consolidated Appropriations Act.

²¹⁶ The U.S.-Israel Science and Technology Commission (USISTC) was established in 1993 to facilitate cooperative ventures between high tech industries in the two countries. The goal of the program is to “to maximize the contribution of technology to economic growth.” While the collaborative work may be somewhat similar to that supported by the BIRD Foundation, “the Science and Technology Commission assists in the commercialization of new technologies with longer lead times to market. These projects involve higher risk and require substantial capital commitments.” The ventures are funded and administered by the U.S.-Israel Science and Technology Foundation. The U.S. and Israeli governments each committed \$15 million to the effort over three years for a total of \$30 million.

²¹⁷ Congress first considered authorizing a program to expand U.S.-Israeli scientific cooperation in the field of renewable energy in legislation entitled, The United States-Israel Energy Cooperation Act (H.R. 1838—110th Congress).

Through FY2021, Congress and the Administration have provided a total of **\$23.7 million** for BIRD Energy.²¹⁸ As of 2021, total combined U.S. and Israeli investment in BIRD Energy for 60 signed projects stood at \$47.5 million.

In late 2021, the United States and Israel announced the awards of \$5.48 million in BIRD Energy grants to six clean energy projects to advance “vehicle technologies, batteries, energy efficiency measures, energy storage and the water-energy nexus.”²¹⁹

U.S.-Israel Center of Excellence in Energy, Engineering and Water Technology (Energy Center)

In 2018, the U.S. Department of Energy and the Israeli Energy Ministry agreed to establish a new program known as the U.S.-Israel Center of Excellence in Energy, Engineering and Water Technology (“the Energy Center”). To date, Congress has appropriated²²⁰ **\$16 million** for the center, and the Israeli government and private sector partners have matched those funds.²²¹ Potential research areas identified by the Energy Center include energy cybersecurity in critical infrastructure, energy storage, and production and utilization of natural gas. According to the Center, the total expected government funding for the Energy Center is \$40 million for 5 years.²²²

BIRD Homeland Security (BIRD HLS)

The BIRD Foundation also manages the BIRD Homeland Security Program, a cooperative undertaking between the U.S. Department of Homeland Security (DHS) and the Israel Ministry of Public Security (MOPS) to further joint research of advanced technologies for Homeland Security.²²³ Currently, DHS’s Science and Technology Directorate (S&T) is working together with Israeli counterparts to develop technologies for first responders.²²⁴ To date, Congress has provided a total of **\$11 million** in funding for BIRD HLS.²²⁵

²¹⁸ Congress specifies funds for BIRD Energy in conference report language accompanying energy and water appropriations legislation. For FY2021, see Division D of the Explanatory Statement accompanying the FY2021 Consolidated Appropriations Act.

²¹⁹ U.S. Embassy Israel, U.S. Department of Energy and Israeli Partners Invest \$5.48 Million In Cooperative Clean Energy Projects, December 9, 2021.

²²⁰ For FY2021, see Division D of the Explanatory Statement accompanying the FY2021 Consolidated Appropriations Act.

²²¹ The U.S.-Israel Strategic Partnership Act (P.L. 113-296) authorized the President to promote cooperative programs with Israel in the fields of energy, water, agriculture, and alternative fuel technologies. P.L. 114-322, the WIIN Act (Water Infrastructure Improvements for the Nation Act), called on the White House Office of Science and Technology Policy to develop a coordinated strategic plan that, among other things, strengthened “research and development cooperation with international partners, such as the State of Israel, in the area of desalination technology.”

²²² BIRD Foundation, Annual Report, 2020.

²²³ The U.S.-Israel Strategic Partnership Act (P.L. 113-296) authorized the Secretary of Homeland Security, acting through the Director of the Homeland Security Advanced Research Projects Agency and with the concurrence of the Secretary of State, to enter into cooperative research pilot programs with Israel to enhance Israel’s capabilities in border, maritime, and aviation security, explosives detection, and emergency services. In 2016, Congress passed P.L. 114-304, the United States-Israel Advanced Research Partnership Act of 2016, a law that permanently authorized the expansion of BIRD HLS to include cybersecurity technologies.

²²⁴ U.S. Department of Homeland Security, “Snapshot: Israel & U.S.: A Unique Partnership in Science, Technology and Business,” January 23, 2018.

²²⁵ See Division F of the Joint Explanatory Statement accompanying the FY2021 Consolidated Appropriations Act.

Other Congressionally Authorized Cooperative Endeavors

The following is a list of other congressionally authorized cooperative endeavors between the United States and Israel, which could lead to the establishment of grant programs managed by both governments.

- **Directed Energy (Lasers)** – Section 1280 of P.L.116-283, the 2021 NDAA, stated that the Defense Department may establish a program to carry out “research, development, test, and evaluation activities, on a joint basis with Israel, to promote directed energy capabilities of mutual benefit to both the United States and Israel...”
- **Health/COVID-19 Cooperation** – Section 1280A of P.L.116-283, the 2021 NDAA, authorized \$4 million a year (FY2021-FY2023) for bilateral cooperation between the U.S. Department of Health and Human Services and the Government of Israel to focus on health technologies to address the challenge of the Coronavirus Disease 2019 (COVID-19) pandemic. U.S.-Israeli health cooperation is longstanding. Since 1978, medical and health researchers from the U.S. Army and Israel Defense Forces have held the biennial Shores conference to share information on military operational medicine, infectious disease, and combat care.²²⁶ In the Joint Explanatory Statement for the Departments of Labor, Health and Human Services, and Education, and Related Agencies accompanying the FY2021 Consolidated Appropriations Act, Congress appropriated \$2 million in FY2021 funding for “for the development of health technologies, including but not limited to the following: artificial intelligence, biofeedback, sensors, monitoring devices, and kidney care.”²²⁷
- **Cybersecurity** – Section 1551 of P.L.117-81, the National Defense Authorization Act for Fiscal Year 2022, required the Department of Homeland Security to establish a grant program to support U.S.-Israeli cooperation in cybersecurity research and commercialization of cybersecurity technology. The act authorized not less than \$6 million a year for such activities from FY2022 through FY2026.
- **Regional Cooperation** - Section 1279 of P.L.116-283, the 2021 NDAA, authorized the State Department and USAID to establish a “program between the United States and appropriate regional partners to provide for cooperation in the Middle East region by supporting projects related to innovation and advanced technologies.”

U.S.-Israel Cooperation in International Development

In 1985, Congress first authorized (by amending Section 106 of the FAA) and appropriated foreign assistance funds to “finance cooperative projects among the United States, Israel, and developing countries.”²²⁸ Based on this congressional mandate, USAID launched two programs in

²²⁶ U.S. Army Medical Research and Development Command (USAMRDC), USAMRMC Hosts Israeli Defense Force at 18th Shores Conference, July 8, 2019.

²²⁷ See Division H, Joint Explanatory Statement for the Departments of Labor, Health and Human Services, and Education, and Related Agencies, accompanying the FY2021 Consolidated Appropriations Act.

²²⁸ See Section 307 of P.L. 99-83, the International Security and Development Cooperation Act of 1985 and P.L. 98-473, the FY1985 Continuing Appropriations Act. This original legislative concept for U.S.-Israeli cooperation in international development came from the 98th Congress and was based on H.R.5424, “A bill to provide for joint United

partnership with Israel: the Cooperative Development Program (CDP - training and technical assistance projects run by Israel in the developing world) and the Cooperative Development Research Program (CDR - scientific research on problems of developing countries).²²⁹ For nearly two decades, Israel used cash aid grants (either from the ESF or DA accounts) to train their development personnel in Israel and in foreign nations. USAID phased out the CDP program after FY2003.²³⁰

Section 1278 of P.L.116-283, the 2021 NDAA, further amended Section 106 of the FAA of 1961 (22 U.S.C. §2151d) to authorize \$2 million a year (FY2021-FY2023) in order to finance cooperative projects among “the United States, Israel, and developing countries that identify and support local solutions to address sustainability challenges relating to water resources, agriculture, and energy storage.” In FY2021, the explanatory statement accompanying the Consolidated Appropriations Act included \$2 million in ESF for “USAID-Israel International Development Cooperation.”

States-Israeli development assistance projects.”

²²⁹ USAID partnered with Mashav, Israel's Agency for International Development Cooperation in the Ministry of Foreign Affairs.

²³⁰ See Subcommittee on Foreign Operations, Export Financing, Related Programs, House Committee on Appropriations, Hearings on Foreign Operations, Export Financing, and Related Program, FY2004.

Appendix. Bilateral Aid to Israel

Table A-1 shows cumulative U.S. aid to Israel for FY1946 through FY2019 in current dollars.

Table A-1. U.S. Bilateral Aid to Israel
millions of U.S. dollars (current non-inflation-adjusted)

Fiscal Year	Economic	Military	Total
1946-2015	34,251.9	88,526.7	122,778.6
2016	15.3	3,101.5	3,116.8
2017	50.1	3,178.0	3,228.1
2018	10.8	3,100.1	3,110.8
2019	8.5	3,300.0	3,308.5
Total	34,336.6	101,206.3	135,542.8

Source: U.S. Agency for International Development (USAID), *U.S. Overseas Loans and Grants: Obligations and Loan Authorizations, July 1, 1945–September 30, 2019*.

Appendix A. Common Acronyms and Abbreviations used in this Report

AECA	Arms Export Control Act
DOD	Department of Defense
DSCA	Defense Security Cooperation Agency
ESF	Economic Support Fund
FAA	Foreign Assistance Act
FMF	Foreign Military Financing
FMS	Foreign Military Sale
HFAC	House Foreign Affairs Committee
IDF	Israel Defense Forces
LOA	Letter of Offer and Acceptance
MOU	Memorandum of Understanding
MRA	Migration and Refugee Assistance
NDAA	National Defense Authorization Act
OSP	Off-Shore Procurement
QME	Qualitative Military Edge
SFOPS	Department of State, Foreign Operations, and Related Programs
SFRC	Senate Foreign Relations Committee
UAE	United Arab Emirates
USAID	U.S. Agency for International Development
WRSA	War Reserves Stock Allies

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