



# U.S. Foreign Aid to Israel

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## Summary

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 an analysis of current issues. For general information on Israel, see CRS Report RL33476, *Israel: Background and U.S. Relations*, by Jim Zanotti.

Israel is the largest cumulative recipient of U.S. foreign assistance since World War II. To date, the United States has provided Israel \$115 billion in bilateral assistance. Almost all U.S. bilateral aid to Israel is in the form of military assistance, although in the past Israel also received significant economic assistance. Strong congressional support for Israel has resulted in Israel receiving benefits not available to any other countries; for example, Israel can use some U.S. military assistance both for research and development in the United States and for military purchases from Israeli manufacturers. In addition, all U.S. assistance earmarked for Israel is delivered in the first 30 days of the fiscal year, while most other recipients normally receive aid in installments. In addition to receiving U.S. State Department-administered foreign assistance, Israel also receives funds from annual defense appropriations bills for joint U.S.-Israeli missile defense programs.

In 2007, the Bush Administration and the Israeli government agreed to a 10-year, \$30 billion military aid package that gradually will raise Israel's annual Foreign Military Financing grant from a baseline of nearly \$2.55 billion in FY2009 to approximately \$3.1 billion for FY2013 through FY2018. For FY2013, the Obama Administration is requesting \$3.1 billion in FMF to Israel.

In the second session of the 112<sup>th</sup> Congress, in addition to the normal foreign operations appropriations process, lawmakers may address: Administration or Israeli requests for additional defense appropriations for joint U.S.-Israeli missile defense; an extension of U.S. loan guarantees to Israel beyond FY2012 when they are set to expire; and new funding for joint U.S.-Israeli scientific research.

The Obama Administration's FY2013 request includes \$3.1 billion in Foreign Military Financing for Israel and \$15 million for refugee resettlement. Within the U.S. Department of Defense, the U.S. Missile Defense Agency's FY2013 budget request includes \$99.8 million in joint U.S.-Israeli co-development for missile defense.

On March 5, 2012, House lawmakers introduced H.R. 4133, the United States-Israel Enhanced Security Cooperation Act of 2012. If passed, this bill would, among other things, allocate additional weaponry and munitions for the forward-deployed United States stockpile in Israel; provide Israel additional surplus defense articles and defense services, as appropriate, in the wake of the withdrawal of United States forces from Iraq; expand Israel's authority to make purchases under the Foreign Military Financing program on a commercial basis; encourage an expanded role for Israel within the North Atlantic Treaty Organization (NATO), including an enhanced presence at NATO headquarters and exercises; support extension of the long-standing loan guarantee program for Israel, recognizing Israel's unbroken record of repaying its loans on time and in full; and require the President to submit a report on the status of Israel's qualitative military edge in light of current trends and instability in the region.

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## Overview

For decades, 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. Although successive Administrations have disapproved of some Israeli policies, including settlement construction in the West Bank and—prior to Israel’s 2005 disengagement—the Gaza Strip, U.S. officials and many lawmakers have long considered Israel to be a reliable partner in the region, and U.S. aid packages for Israel have reflected this belief. Opponents of U.S. aid to Israel argue that U.S. assistance to Israel indirectly causes suffering to Palestinians by supporting Israeli arms purchases and by blunting international pressure on Israel to reach a solution to the Palestinian conflict.

Though aid to Israel has both supporters and detractors, overall U.S. public support for Israel remains strong. According to a February 2011 Gallup poll that measured Americans' sympathies toward the disputants in the Israeli-Palestinian conflict, a near record-high 63% said their sympathies lie more with the Israelis.<sup>1</sup> There is less specific public polling data on support for aid to Israel. Overall, American public support for all foreign aid programs is declining. According to a January 2011 Gallup poll, 59% of Americans favored cutting foreign aid. According to a February 2011 poll conducted by the Israel Project, a non-profit educational organization that aims to portray a positive view of Israel, when asked if the United States should continue foreign aid to Israel used for buying U.S. military equipment, 47% of respondents responded affirmatively and 40% of respondents said that the United States should reduce aid to Israel.<sup>2</sup>

The historic political changes occurring in the Arab world and the ongoing security challenges posed by Iran and its allies may affect the U.S.-Israeli aid relationship in varying ways. Some U.S. leaders perceive increasing threats to Israel, particularly from Iran and its Lebanese Shiite ally Hezbollah, and therefore may advocate for additional funding for programs such as short and long range missile defense. Others, who may also strongly support Israel’s security, also may see an opportunity for Israel to respond to empowered public opinion in neighboring Arab countries like Egypt through diplomatic means, especially by reenergizing peace initiatives with the Palestinians, and therefore may seek aid packages that offer incentives for this behavior.<sup>3</sup> The wave of continued Arab unrest may even cause Israel to advocate for more global financial support for its Arab neighbors. Fear of unrest in neighboring Jordan, for example, could drive Israel to seek additional U.S. foreign assistance in support of the neighboring Arab monarchy.

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<sup>1</sup> Lydia Saad, “Americans Maintain Broad Support for Israel,” *Gallup*, February 28, 2011.

<sup>2</sup> The national survey of 1,000 likely voters was conducted by Greenberg Quinlan Rosner February 7-9, 2011. Available online at: <http://www.theisraelproject.org/atf/cf/%7B84dc5887-741e-4056-8d91-a389164bc94e%7D/2011-02USNATIONALADD-ONSPRESENTATION-HILLVISITS.PDF>.

<sup>3</sup> In October 2011, U.S. Secretary of Defense Leon Panetta stated that while Israel is powerful, “Is it enough to maintain a military edge if you’re isolating yourself in the diplomatic arena?... Real security can only be achieved by both a strong diplomatic effort as well as a strong effort to project your military strength.” See, “Panetta Says Israel Is Risking Isolation,” *New York Times*, October 3, 2011.

## A Changing Fiscal Landscape: Aid and U.S. Deficit Reduction

U.S. lawmakers continue to grapple with varied plans for reducing the nation's \$15.2 trillion federal debt. Some lawmakers see foreign affairs funds, particularly for foreign aid programs, as expenditures that can be cut in order to reduce the deficit; indeed, some Members of Congress have called for phasing out foreign assistance entirely. Though many leaders have exempted aid to Israel from such plans, general opposition to U.S. foreign aid has caused some Israel advocates concern. In March 2011, the American Israel Public Affairs Committee (AIPAC) published a memorandum asserting that foreign aid is “an essential component of America’s national security strategy.”<sup>4</sup>

In August 2011, Congress passed the Budget Control Act of 2011 (BCA), P.L. 112-25, intended to reduce the federal deficit by at least \$2.1 trillion over the FY2012-FY2021 period. On November 21, 2011, the co-chairs of the Joint Select Committee on Deficit Reduction established by this Act to identify the necessary savings announced that they were unable to reach agreement on a package of cuts. As a result, a \$1.2 trillion automatic spending reduction process (i.e., a combination of sequestration and lower discretionary spending caps) has been triggered, to begin in January 2013 unless Congress and the President act to eliminate or change the process before then.<sup>5</sup>

For FY2013 only, P.L. 112-25 requires a sequestration—a largely across-the-board cut—of both discretionary and mandatory spending. The across-the-board cuts are applied to each non-exempt account, and to each program, project, and activity within each non-exempt account (as required by Section 256(k) of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended by the BCA).

Congress intended the 1985 law (P.L. 99-177), otherwise known as Gramm-Rudman-Hollings named after its cosponsors, to apply across-the-board cuts to all accounts, including U.S. aid to Israel. Gramm-Rudman-Hollings enacted a process of sequestration for FY1986 and beyond. That year all foreign aid accounts, including Israel’s, were cut by 4.3%. Because Israel’s aid is usually disbursed within 30 days of the enactment of the foreign operations appropriations bill and because Gramm-Rudman-Hollings was passed in December 1985, the government of Israel ended up “voluntarily” returning a total of \$128.6 million in FY1986 economic (\$51.6 million) and military aid (\$77 million) to the United States Treasury.<sup>6</sup>

Currently, if the 2011 BCA (P.L. 112-25) is not amended, the Congressional Budget Office has estimated that the sequestration for FY2013 will require across-the-board cuts of about 8.5% in most discretionary spending accounts, including foreign aid programs.<sup>7</sup> Under this scenario, if aid to Israel is not exempted, it would be reduced in FY2013 by roughly \$263.5 million. However,

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<sup>4</sup>[http://www.aipac.org/~media/Publications/Policy%20and%20Politics/AIPAC%20Analyses/Issue%20Memos/2011/03/AIPAC\\_Memo\\_Foreign\\_Aid\\_Keeps\\_America\\_Safe\\_Strong\\_and\\_Prospereous.pdf](http://www.aipac.org/~media/Publications/Policy%20and%20Politics/AIPAC%20Analyses/Issue%20Memos/2011/03/AIPAC_Memo_Foreign_Aid_Keeps_America_Safe_Strong_and_Prospereous.pdf).

<sup>5</sup> See, CRS Report R41965, *The Budget Control Act of 2011*, by Bill Heniff Jr., Elizabeth Rybicki, and Shannon M. Mahan.

<sup>6</sup> See, “Israel may not Suffer as Much as Other Nations from Painful Budget Cuts,” *Washington Post*, January 15, 1986.

<sup>7</sup> CBO, *The Budget and Economic Outlook: FY2012 to FY2022*, pp. 12-13.

many lawmakers have publicly opposed cuts in aid to Israel. For FY2014 to FY2021, the Budget Control Act of 2011 does not mandate across-the-board cuts to discretionary spending. Instead, it reduces discretionary spending cap levels broadly, leaving it to Congress and the Administration to decide which programs, projects, and activities would be fully funded or not.

Although it is too early to predict which countries or functional accounts may be affected by possible aid reductions, the anticipation of changes to aid levels may spur diplomatic negotiations with Israel over future assistance. For example, it is possible that Israel, which receives approximately 60% of all U.S. Foreign Military Financing (FMF) and is the second-largest recipient of total U.S. aid worldwide (Afghanistan is the largest recipient), may promote more U.S.-Israeli cooperative programs in the future in order to place the U.S.-Israeli aid relationship on more equal footing. In the mid 1990s, amidst earlier efforts in Congress to reduce foreign aid funding, Israel proposed (and Congress agreed) to phase out U.S. economic aid to Israel entirely. The growth of the Israeli economy had apparently obviated the need for future U.S. economic grant aid. Under the terms of the current U.S.-Israel Memorandum of Understanding on assistance, both parties have agreed upon military aid levels through FY2018. In the years ahead, it is possible that both parties may attempt to restructure U.S. assistance without jeopardizing U.S. efforts to maintain Israel's qualitative military edge (QME—see below). On the other hand, the U.S. aid program to Israel may also continue without restructuring due to broad public support and the continued need to counter emerging threats in the region.

In November 2011, Assistant Secretary of State for Political-Military Affairs Andrew J. Shapiro publicly reaffirmed the Obama Administration's commitment to preserving Israel's aid and QME. In his remarks, he stated:

But today, in these budget constrained times—some are now asking the question why should we keep providing aid to Israel? Yes, Israel is a long time democratic ally and we share a special bond—but some skeptics are questioning whether that's enough of a reason to continue to spend hard earned American tax payer dollars on Israel's security. I can answer that skepticism directly—we don't just support Israel because of a long standing bond, we support Israel because it is in our national interests to do so. This aspect of our relationship with Israel is often overlooked. America's commitment to Israel's security and prosperity has extended over many decades because our leaders on both sides of the aisle have long understood that a robust United States-Israel security relationship is in our interests. Our support for Israel's security helps preserve peace and stability in the region. If Israel were weaker, its enemies would be bolder. This would make broader conflict more likely, which would be catastrophic to American interests in the region. It is the very strength of Israel's military which deters potential aggressors and helps foster peace and stability. Ensuring Israel's military strength and its superiority in the region is therefore critical to regional stability and as a result is fundamentally a core interest of the United States.<sup>8</sup>

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<sup>8</sup> "Ensuring Israel's Qualitative Military Edge," Remarks by Andrew J. Shapiro, Assistant Secretary, Bureau of Political-Military Affairs, Remarks to The Washington Institute for Near East Policy, Washington, DC, November 4, 2011.

## Qualitative Military Edge (QME)

Almost all U.S. aid to Israel is in the form of military assistance.<sup>9</sup> U.S. military aid has helped transform Israel's armed forces into one of the most technologically sophisticated militaries in the world. U.S. military aid for Israel has been designed to maintain Israel's "qualitative military edge" (QME) over neighboring militaries, since Israel must rely on better equipment and training to compensate for a manpower deficit in any potential regional conflict. U.S. military aid, a portion of which may be spent on procurement from Israeli defense companies, also has helped Israel build a domestic defense industry, which ranks as one of the top 10 suppliers of arms worldwide.

Successive administrations have routinely affirmed the U.S. commitment to strengthening Israel's QME. For years, no official or public U.S. definition of QME existed.<sup>10</sup> In 2008, Congress passed legislation (P.L. 110-429, the Naval Vessel Transfer Act of 2008) that 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.

Furthermore, Section 201 of the act requires the President 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 to Israel." It also further amends Section 36 of the Arms Export Control Act to require certifications for proposed arms sales "to any country in the Middle East other than Israel" to include "a determination that the sale or export of the defense articles or defense services will not adversely affect Israel's qualitative military edge over military threats to Israel."

Over the years, Israeli officials have expressed concern over U.S. sales of sophisticated weaponry, particularly aircraft, airborne radar systems, and precision-guided munitions, to Arab Gulf countries, notably Saudi Arabia. Arab critics of U.S. military aid to Israel routinely charge that Israeli officials exaggerate the threat posed by Israel's neighbors in order to justify calls for increased U.S. support. As the United States is one of the principal suppliers of defense equipment and training to both Israel and Saudi Arabia, U.S. policymakers and defense officials must carefully navigate commitments to the two countries, including upholding the U.S. commitment to maintaining Israel's QME. The threat of a nuclear-armed Iran, though it has partially aligned Israeli and Sunni Arab interests in deterring a shared rival, also may be exacerbating Israeli fears of a deteriorated QME as Saudi Arabia and other Gulf states dramatically increase defense procurements from U.S. and other foreign suppliers to respond to the challenge from Iran they perceive.

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<sup>9</sup> For many years, U.S. economic aid helped subsidize a lackluster Israeli economy, though since the rapid expansion of Israel's hi-tech sector in the 1990s (sparked partially by U.S.-Israeli scientific cooperation), Israel is now considered a fully industrialized nation. 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.

<sup>10</sup> William Wunderle and Andre Briere, *U.S. Foreign Policy and Israel's Qualitative Military Edge: The Need for a Common Vision*, Washington Institute for Near East Policy, Policy Focus #80, January 2008.



Since the passage of P.L. 110-429, the United States and Israel established a bilateral QME working group in which Israel can advocate against proposed U.S. sales to Arab states it believes adversely affects its QME.<sup>11</sup>

## The Costs and Benefits of Israeli Dependence on U.S. Weaponry

Although many U.S. and Israeli officials consider military aid a key component of the overall U.S.-Israeli relationship, some Israelis believe that the aid relationship creates too much dependence on the United States.<sup>12</sup> Overall, Israel greatly relies on advanced U.S. weaponry to maintain its conventional superiority. For the most part, Israelis say that their dependence on American equipment has been beneficial, though at times, some Israelis (like many other foreign recipients of U.S. aid), have expressed concern that U.S. military aid comes with conditions. For example, the United States effectively maintains veto power over certain sales by Israel (or any other country that buys U.S. equipment) to third parties of defense equipment that may contain U.S. technology (see “Aid Restrictions and Possible Violations”).

In contrast to the limited conditions on U.S. military aid that some Israelis see as a concern, some other foreign suppliers have at times used arms sales as leverage in attempting to pressure Israel, particularly on the Palestinian issue. In 2011, German Chancellor Angela Merkel reportedly threatened to cancel the sale of a Dolphin-class submarine unless Israel released Palestinian Authority tax revenue it had been withholding in protest of Palestinian attempts to seek membership at the United Nations.<sup>13</sup> Other reports suggested that Germany had been reconsidering the deal due to Israeli plans to construct 1,100 housing units in East Jerusalem. Germany ultimately agreed to sell Israel the submarine at a discounted cost.

## U.S. Bilateral Military Aid to Israel

### The 10-Year Military Aid Agreement

In 2007, the Bush Administration and the Israeli government agreed to a 10-year, \$30 billion military aid package that gradually would raise Israel’s annual Foreign Military Financing grant from a baseline of nearly \$2.55 billion in FY2009 to approximately \$3.1 billion for FY2013 through FY2018. Under the terms of the agreement, Israel will still be able to spend up to 26.3% of U.S. assistance on Israeli-manufactured equipment (known as Off-Shore Procurement or OSP). The agreement states 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.”<sup>14</sup> According to former Under Secretary of State for Political Affairs Nicholas Burns, who signed the Memorandum of Understanding on U.S. Military Assistance:

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<sup>11</sup> "Israeli Brass Decry U.S. Arms Sales To Arab States," *Defense News*, January 23, 2012.

<sup>12</sup> For a more detailed discussion see, Haim Malka, *Crossroads: The Future of the U.S.-Israel Strategic Partnership*, Center for Strategic and International Studies, Washington, D.C. 2011, pp-89-94.

<sup>13</sup> "'Israel released PA funds under German pressure'," *Jerusalem Post*, December 5, 2011.

<sup>14</sup> United States-Israel Memorandum of Understanding, Signed by then U.S. Undersecretary of State R. Nicholas Burns and Israeli Ministry of Foreign Affairs Director General Aaron Abramovich, August 16, 2007.

We consider this 30 billion dollars in assistance to Israel to be an investment in peace - in long-term peace. Peace will not be made without strength. Peace will not be made without Israel being strong in the future. Of course, our objective as a country and our specific objective as a government is to contribute to that peace, a peace between Israel and the Palestinian people, the creation of an independent Palestinian state willing to live side by side in peace with Israel, and a general peace in the region that has eluded the Israeli people for 59 years but which is, we hope, the destiny of the Israeli people as well as the Arab peoples of the region. Our policy in this entire region is dedicated to that final objective.<sup>15</sup>

## Foreign Military Financing (FMF) and Arms Sales

Israel is the largest recipient of U.S. Foreign Military Financing. In FY2012, Israel's portion of the total FMF account appropriated in P.L. 112-74, the Consolidated Appropriations Act, 2012, was 60%.<sup>16</sup> Annual FMF grants to Israel represent 18% to 22% of the overall Israeli defense budget.<sup>17</sup>

### Early Transfer

For years, Congress has mandated that Israel receive its FMF aid in a lump sum during the first month of the fiscal year. The FY2012 Consolidated Appropriations Act (P.L. 112-74) states that "the funds appropriated under this heading for assistance for Israel 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 Federal Reserve Bank. Israel has used interest collected on its military aid to pay down its debt (non-guaranteed) to the United States, which, according to the U.S. Treasury Department, stood at \$538.7 million as of March 31, 2011.<sup>18</sup> Israel cannot use accrued interest for defense procurement inside Israel.

### FMF for in-Country Purchase

Most analysts consider Israel's ability to use a significant portion of its annual military aid for procurement in Israel to be a valuable aspect of its assistance package; no other recipient of U.S. military assistance has been granted this benefit.<sup>19</sup> Since FY1988, the FMF procurement earmark for purchases within Israel has been incorporated into annual foreign assistance legislation.

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<sup>15</sup> R. Nicholas Burns, Under Secretary of State for Political Affairs, "Remarks and Press Availability at Signing Ceremony for Memorandum of Understanding on U.S. Military Assistance," Released by the American Embassy Tel Aviv—Press Section, August 16, 2007.

<sup>16</sup> This percentage excludes Overseas Contingency Operations (OCO).

<sup>17</sup> "Highlights: Israel Economy News 14-20 Jun 09 (Israel—OSC Summary in English)," *Open Source Center*, June 20, 2009, GMP20090620739005.

<sup>18</sup> CRS correspondence with U.S. Treasury Department.

<sup>19</sup> Israel was first granted FMF for use in Israel in 1977, when it asked for and received permission to use \$107 million in FY1977 FMF funds to develop the Merkava tank (prototype completed in 1975 and added to Israeli arsenal in 1979). Several years later, Israel asked for a similar waiver to develop the Lavi ground-attack aircraft, and Congress responded with legislation allowing Israel to spend \$250 million of FMF in Israel to develop the Lavi. It was estimated that the United States provided between \$1.3 and \$1.8 billion in Lavi development costs before the United States and Israel agreed to terminate the project in 1988. In order to defray the cancellation costs of the Lavi program, the United States agreed to raise the FMF earmark for procurement in Israel to \$400 million. For background on the cancellation of the Lavi fighter, see Dan Raviv and Yossi Melman, *Friends in Deed: Inside the U.S.-Israeli Alliance*, New York: Hyperion, 1994, pp. 263-268.

Currently, approximately 26.3% of Israel's FMF funds may be used for domestic defense purchases (\$808.7 million in FY2012). Since the earmark is linked to a percentage and not a specific dollar amount, as U.S. military aid to Israel has increased, the amount set aside for defense purchases in Israel also has increased.

Successive Administrations and many lawmakers believe that a strong domestic Israeli defense industry is crucial to maintaining Israel's technological edge over its neighbors. The proceeds to Israeli defense firms<sup>20</sup> from purchases with U.S. funds have allowed the Israeli defense industry to achieve necessary economies of scale and produce highly sophisticated equipment for niche markets. Defense experts note that high annual amounts of U.S. military assistance force private and semi-private Israeli defense companies to place a greater business emphasis on exports, since a large portion of Israeli government weapons procurement is spent on American equipment. According to Beth McCormick, former acting director of the U.S. Defense Technology Security Administration, Israeli manufacturers must sell as much as 75% of their output abroad to stay profitable, a far higher share than U.S. military contractors.<sup>21</sup> Israel is among the world's leading arms exporters. Between 2003 and 2010, Israel was the eighth-largest arms exporter in the world with sales (value of agreements not deliveries) worth a total of \$12 billion.<sup>22</sup>

### **F-35 Joint Strike Fighter**

After years of negotiations, the United States and Israel announced in 2010 that Israel will purchase 19 F-35s, the fifth-generation stealth aircraft considered to be the most technologically-advanced fighter jet ever made, at a cost of \$2.75 billion. They will be paid for entirely using FMF grants.<sup>23</sup> Israel may purchase additional squadrons of F-35s in the future and has received U.S. approval to purchase up to 75 aircraft.<sup>24</sup> Prior to the agreement, the two sides had negotiated over the level of Israeli customization of the F-35. Reportedly, a June 2010 Letter of Acceptance indicated that Israel will be able to install its own radio and datalink systems, and discussions over the integration of electronic warfare capabilities will continue and may be approved should Israel purchase additional planes.<sup>25</sup> As part of the F-35 deal, the United States agreed to make reciprocal purchases of equipment from Israel's defense industries estimated at \$4 billion.<sup>26</sup> Due to delays in the overall F-35 program, the expected delivery of the aircraft to Israel has been delayed. In the meantime, without the advanced fighters, Israel may choose to upgrade its existing F-15 or F-16 fighters.

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<sup>20</sup> The primary state-owned and private Israeli defense contractors are Israel Aerospace Industries Ltd (IAI), Elbit Systems Ltd, Rafael Ltd (Rafael Advanced Defence Systems Ltd), Elisra Group, and Israel Military Industries (IMI).

<sup>21</sup> "Pentagon says Israel Improves Arms-Export Controls," *Reuters*, September 5, 2007.

<sup>22</sup> CRS Report R42017, *Conventional Arms Transfers to Developing Nations, 2003-2010*, by Richard F. Grimmett.

<sup>23</sup> In 2010, During intense Obama Administration negotiations with the Israeli government over a possible Israeli settlement freeze in the West Bank, the Administration had reportedly offered Israel, among other things, 20 additional F-35s in exchange for a 90-day moratorium on settlement construction.

<sup>24</sup> DSCA's notification to Congress of the F-35 sale is available online at: [http://www.dsca.mil/PressReleases/36-b/2008/Israel\\_08-83.pdf](http://www.dsca.mil/PressReleases/36-b/2008/Israel_08-83.pdf).

<sup>25</sup> "Defense Minister Barak approves purchase of 20 F-35 fighters for around \$2.75 billion," *Ha'aretz*, August 16, 2010.

<sup>26</sup> "Israel set to build wings for some 800 F-35s," *Reuters*, August 30, 2010.

## Bunker Buster Bombs

Over the past several years, the United States has sold Israel several variants of smart, “bunker-buster” bombs that could be used to strike buried targets, including the GBU-28 Hard Target Penetrator, a 5,000 pound-class smart bomb that can penetrate up to 20 feet of concrete. Congress was first notified of the GBU-28 sale in 2005. The GBU-28 was first used in the 1991 Gulf war, and Israel had sought the munitions since the late 1990s. In 2008, the United States authorized Israel to receive the GBU-39 Small Diameter Bomb, a 250-pound class weapon that can penetrate three to six feet of concrete. Israel was the first customer outside of the United States to receive the GBU-39.<sup>27</sup> However, according to one report, the GBU-28 and GBU-39 may not have sufficient strike capacity to damage Iranian underground nuclear targets such as the Fordow uranium enrichment plant (near the city of Qom), which is reportedly buried nearly 250 feet inside a mountain.<sup>28</sup>

## Excess Defense Articles

The Excess Defense Articles (EDA) program provides one means by which the United States can advance foreign policy objectives—assisting friendly and allied nations through provision of equipment in excess of the requirements of its own defense forces. According to the Defense Security Cooperation Agency (DSCA), Israel continues to be the largest single recipient of EDA material.<sup>29</sup> From 2001 to the present, Israel has been authorized over \$330 million in EDA. In April 1998, the United States designated Israel as a “major non-NATO ally,” which qualifies Israel to receive Excess Defense Articles (EDA) under Section 516 of the Foreign Assistance Act and Section 23(a) of the Arms Export Control Act. DSCA manages the EDA program, which enables the U.S. to reduce its inventory of outdated equipment by providing friendly countries with necessary supplies at either reduced rates or at no charge.<sup>30</sup>

## 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, from short-range missiles and rockets fired by non-state actors, such as Hamas and Hezbollah, to mid- and longer-range ballistic missiles in Syria’s and Iran’s arsenals. U.S.-Israeli missile defense cooperation has perennially been authorized and appropriated in the defense authorization and appropriations bills. Such efforts generally are not considered a form of direct aid, but many U.S. and Israeli observers consider them a vital component of Israel’s strategic relationship with the United States. Israel and the United States each financially contribute to several projects and share technology from co-developed weapons systems.

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<sup>27</sup> DSCA’s notification to Congress of the GBU-39 is available online at: [http://www.dsca.mil/PressReleases/36-b/2008/Israel\\_08-82.pdf](http://www.dsca.mil/PressReleases/36-b/2008/Israel_08-82.pdf).

<sup>28</sup> “ANALYSIS-Iran nuclear sites may be beyond reach of ‘bunker busters’,” *Reuters*, January 12, 2012.

<sup>29</sup> DSCA Israel Country Information Paper.

<sup>30</sup> To access DSCA’s Excess Defense Articles database, see <http://www.dsca.mil/programs/eda/search.asp>.

The Department of Defense, Missile Defense Agency's FY2013 request for joint U.S.-Israeli co-development is \$99.8 million which is \$6 million below the President's FY2012 request. However, according to one source, "Though the administration's request for missile defense monies has dropped somewhat in recent years—from \$121.7m. in 2011 to \$106.1m. in 2012 to 2013's \$99.8m.—during each of those cycles, Congress has consistently increased the final allocation."<sup>31</sup>

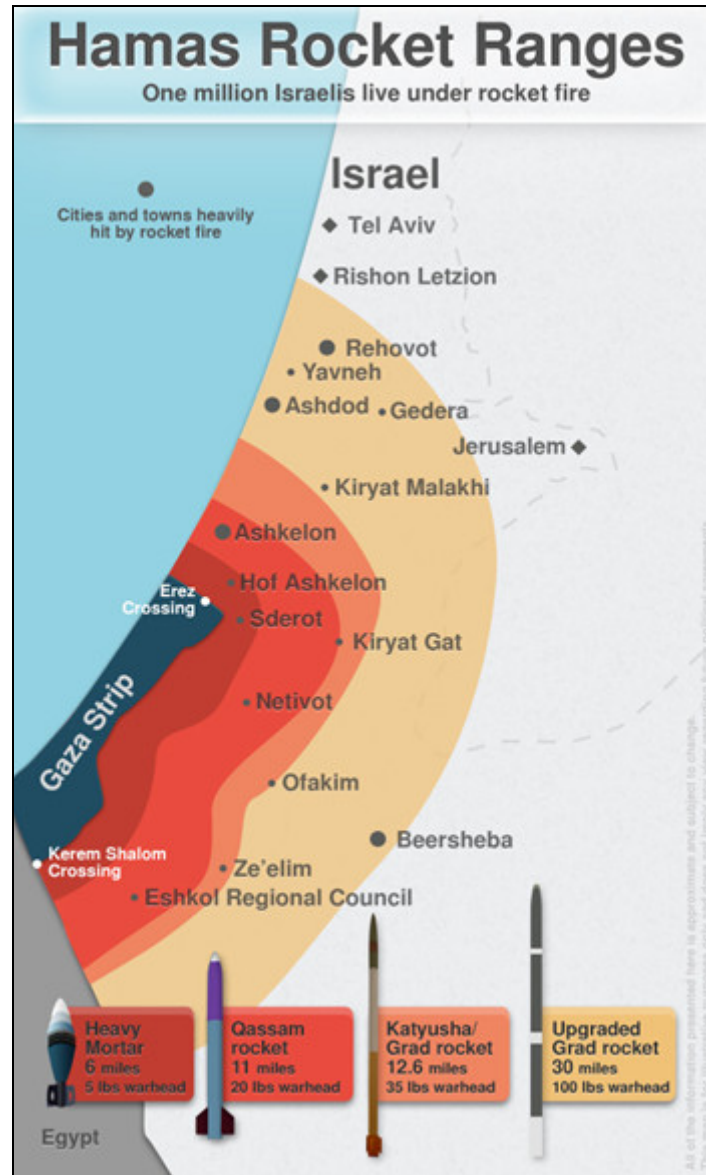
## **Multi-Tiered Missile Defense**

In addition to U.S.-supplied Hawk and Patriot missile batteries, in the past several years U.S.-Israeli missile defense cooperation has evolved to include the co-development of several systems. Israel also has developed its own missile defense programs without U.S. collaboration.

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<sup>31</sup> "Congress Ready To Increase Israel Defense Funding," *Jerusalem Post*, February 15, 2012.

Figure I. Ranges of Rockets Fired from the Gaza Strip



**Source:** Open Source Center, 'Nonstop Barrage' of Rockets Continues, No Israelis Hurt; Mortar Hits Gaza Truck, Document ID# GMP20120312739003 Israel—OSC Summary in English, March 12, 2012.

**Note:** Although the graphic refers exclusively to Hamas, other Palestinian groups, such as the Popular Resistance Committees (PRC) and Islamic Jihad, have fired rockets into Israel.

### Iron Dome

The United States has helped defray the cost of Israel’s domestically-developed short-range anti-rocket system, dubbed “Iron Dome.” Iron Dome is designed to intercept very short-range threats between 2.5 and 45 miles in all weather situations. It was developed by Rafael Advanced Defense Systems. Development of Iron Dome began in February 2007. In response to Palestinian rocket

attacks from Gaza, Israel deployed Iron Dome batteries for the first time in April, August, and October 2011 to protect the cities of Ashdod, Beersheba, and Ashkelon. Each battery costs approximately \$50 million.<sup>32</sup> Many observers have praised the system's performance. According to one report, Iron Dome interceptors succeeded 70% of the time they were fired in destroying incoming projectiles.<sup>33</sup> The Israeli military discovered that a radar failure had caused some of the misses and have since resolved the malfunction.

However, Israeli leaders have cautioned that rocket and missile defense systems are not capable of fully protecting Israeli population centers in the event of intensified, sustained attacks from its enemies. The Iron Dome system is not designed to protect against very short range projectiles due to their abbreviated flight times, leaving towns in the immediate vicinity of the Gaza border—such as Sderot (estimated population: 21,000)—more vulnerable. The Israeli military plans to deploy nine Iron Dome batteries<sup>34</sup> across the country by 2013. It believes it requires a total of between 10-15 batteries to adequately protect most urban areas. Israel is reportedly considering exporting the system to customers in Asia (such as South Korea, Singapore, and India) in order to recoup Iron Dome's cost.

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<sup>32</sup> CRS conversations with Israeli officials, April 2011. According to these same conversations, each Iron Dome interceptor projectile costs between \$80,000 and \$90,000.

<sup>33</sup> "Iron Dome hits 70% of militant rockets," *Jane's Defence Weekly*, January 6, 2012.

<sup>34</sup> Each Iron Dome battery contains three launchers each equipped with 20 Tamir interceptor missiles. See "Rafael and Raytheon collaborate on Iron Dome project," *Jane's Defence Weekly*, August 17, 2011; "Iron Dome anti-rocket system was never meant to protect Israeli towns," *Ha'aretz*, December 21, 2010.

Figure 2. Iron Dome Battery



Source: Jane's Defence Weekly

In March 2010, the Obama Administration announced that it would support \$205 million in defense assistance to Israel for the purchase of up to ten Iron Dome batteries. Section 229 of P.L. 111-383 (Ike Skelton National Defense Authorization Act for Fiscal Year 2011) authorized the Secretary of Defense to provide that sum to the government of Israel for the Iron Dome system.<sup>35</sup> Section 8072 of P.L. 112-10 (Department of Defense and Full-Year Continuing Appropriations Act, 2011) appropriated the \$205 million in funding for Iron Dome, along with additional funding to support the other components of U.S. missile defense cooperation with Israel. For FY2012, the Administration did not request specific funding for Iron Dome, and Congress has not appropriated funds for it.

<sup>35</sup> In the 111<sup>th</sup> Congress, the House passed H.R. 5327, United States-Israel Rocket and Missile Defense Cooperation and Support Act, which authorized the Administration “to provide assistance to the Government of Israel for the procurement, maintenance, and sustainment of the Iron Dome Short Range Artillery Rocket Defense System for purposes of intercepting short-range rockets, missiles, and mortars launched against Israel.” A Senate version, S. 3451, was referred to the Senate Foreign Relations Committee but was not reported out during the 111th Congress.



## David's Sling

In August 2008, Israel and the United States officially signed a “project agreement” to co-develop the David's Sling system. 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 40 km to 300 km, such as those possessed by Hezbollah in Lebanon, as well as by Syria and Iran. David's Sling is designed to intercept missiles that fall below the optimal capability for Israel's Arrow ballistic missile interceptor. It is being jointly developed by Israel's Rafael Advanced Defense Systems and U.S.-based Raytheon. David's Sling uses Raytheon's Stunner missile for interception, and each launcher can hold up to 16 missiles. The system is expected to be operational by the end of 2012. According to Lt. Gen. Henry Obering, director of the U.S. Missile Defense Agency, “We wanted a truly co-managed program because the United States will be very interested in this for our own purposes.... The agreement we just signed allows us to work through specific cost-sharing arrangements and other program parameters.”<sup>36</sup> Once deployed, David's Sling could replace U.S.-supplied Hawk surface-to-air missiles that have been used by Israel for nearly half a century.

## The Arrow and Arrow II

Since 1988, Israel and the United States have been jointly developing the Arrow Anti-Missile System, a weapon with a theater ballistic missile defense capability. 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 Arrow II program, a joint effort of Boeing and Israel Aerospace Industries (IAI), is designed to defeat longer-range ballistic missiles. One Arrow II battery can protect major areas of Israeli territory.

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). An MOU was signed with Israel on May 6, 1986 to jointly develop an indigenous Israeli capability to defend against ballistic missiles.<sup>37</sup> 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.

Under the 1986 agreement allowing Israel to participate in SDI, the United States and Israel have co-developed different versions of the Arrow anti-ballistic missile. The total U.S. financial contribution so far exceeds \$1 billion. The system became operational in 2000 in Israel and has been tested successfully. The Defense Department's Missile Defense Agency has agreed to extend the U.S.-Israel Arrow System Improvement Program (ASIP) and post-ASIP through 2013. Since 2001, Israel and the United States have conducted a joint biennial exercise, called Juniper Cobra, to work on integrating their weapons, radars, and other systems.

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<sup>36</sup> “U.S.-Israel To Develop David's Sling Missile Defense,” *DefenseNews.com*, August 7, 2008.

<sup>37</sup> 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.

## **High Altitude Missile Defense System (Arrow-III)**

Fearing a potential nuclear threat from Iran, Israel has sought a missile interceptor that operates at a higher altitude and greater range than the Arrow. In October 2007, the United States and Israel agreed to establish a committee to evaluate Israel's proposed "Arrow III," a top-tier system designed to intercept medium-range ballistic missiles. The Arrow III will be a more advanced version—in terms of speed, range and altitude—of the current Arrow II interceptor. In the spring and summer of 2008, Israel decided to begin production of the Arrow III and the United States agreed to co-fund its development despite an initial proposal by Lockheed Martin and the Department of Defense urging Israel to purchase the Terminal High-Altitude Area Defense (THAAD) missile defense system instead. The Arrow III, made by Israel Aerospace Industries (IAI) and Boeing, is expected to be deployed by 2014. In July 2010, the United States and Israel signed a bilateral agreement to extend their cooperation in developing and producing the Arrow III.

## **X-Band Radar**

One of the most significant gestures of U.S. support for Israel's missile defense architecture has been the deployment of the AN/TPY-2 X-Band radar system (built by Raytheon Co.) to Israel in late 2008. Not only is the X-Band system far more capable of detecting incoming missiles than Israel's existing radar,<sup>38</sup> but the United States also has linked the X-Band to its global network of satellites in the U.S. Defense Support Program (DSP) and to the global U.S. Ballistic Missile Defense System (BMDS). The DSP is the principal component of the U.S. Satellite Early Warning System to detect missile launches.<sup>39</sup> According to various media reports, the X-Band system is now operational. It will remain U.S.-owned and is operated by U.S. troops and defense contractors—the first indefinite U.S. military presence to be established on Israeli soil. Reportedly, the system has been deployed to a secret location in the southern Negev desert.

P.L. 110-417, the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, authorized up to \$89 million for the activation and deployment of the AN/TPY-2 forward-based X-band radar to a "classified location."<sup>40</sup> According to Section 236 of the act, this funding was contingent on a report from the Secretary of Defense to the Committees on Armed Services of the Senate and the House of Representatives. The report was to describe, among other things, the X-band radar's proposed location; the operational parameters of the deployment of the radar; and the cost-sharing arrangements between the United States and the country in which the radar was to be deployed.

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<sup>38</sup> The X-Band system can detect incoming missiles from 500-600 miles. Currently, Israel's early warning system is only able to detect missiles from 100 miles out.

<sup>39</sup> Israel was first given access to DSP in 2001 but only on a per-request, rather than constant, basis.

<sup>40</sup> In report language (H.Rept. 110-652) accompanying H.R. 5658, the House-passed FY2009 Defense Authorization bill, Members stated that "The State of Israel faces a real and growing threat from short- and medium-range ballistic missiles from states such as the Syrian Arab Republic and the Islamic Republic of Iran. The committee believes that the deployment of a U.S. Army-Navy/Transportable-2 (AN/TPY-2) missile defense discrimination radar to Israel would greatly increase the capabilities of both Israel and U.S. forces deployed in support of Israel to defend against ballistic missile threats. Therefore, the committee urges the Department of Defense to begin discussions with Israel about the possibility of deploying an AN/TPY-2 radar on its territory at the earliest feasible date." The Senate version, S. 3001, included an amendment making funds available for the deployment of the AN/TPY-2 forward-based X-band radar.

**Table I. Defense Budget Appropriations for U.S.-Israeli Missile Defense:  
FY2006-FY2012**

(current \$ in millions)

System Type	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013 Request
Short-Range (David's Sling)	\$10.0	\$20.4	\$37.0	\$72.895	\$80.092	\$84.722	\$110.525	n/a
Arrow (Arrow-2)	\$122.866	\$117.494	\$98.572	\$74.342	\$72.306	\$66.427	\$58.955	n/a
High Altitude (Arrow-3)	—	—	\$20.0	\$30.0	\$50.036	\$58.966	\$66.220	n/a
Iron Dome	—	—	—	—	—	\$205.0	—	n/a
<b>Total</b>	<b>\$132.866</b>	<b>\$137.894</b>	<b>\$155.572</b>	<b>\$177.237</b>	<b>\$202.434</b>	<b>\$415.115</b>	<b>\$235.700</b>	<b>\$99.836</b>

## Emergency U.S. Stockpile in Israel

In the early 1980s, Israeli leaders sought to expand what they called their “strategic collaboration” with the United States military by inviting U.S. arms and equipment to be stockpiled at Israeli bases for use in wartime.<sup>41</sup> Nearly a decade later, the United States agreed to establish munitions stockpiles in Israel for use by the United States and, with U.S. permission, for use by Israel in emergency situations. The United States European Command (EUCOM) manages the War Reserves Stock Allies-Israel (WRSA-I) program. The United States stores missiles, armored vehicles and artillery ammunition in Israel. According to one Israeli officer, “Officially, all of this equipment belongs to the US military.... If however, there is a conflict, the IDF can ask for permission to use some of the equipment.”<sup>42</sup> During the 2006 war against Hezbollah in Lebanon, the United States granted Israel access to the stockpile.

The initial value of the U.S. materiel stored in Israel was set at \$100 million. It increased over time to \$800 million in 2010. In the 111<sup>th</sup> Congress, lawmakers passed P.L. 111-266, the Security Cooperation Act of 2010. Section 302 of the Act amends the Department of Defense Appropriations Act, 2005 to extend the President's authority to transfer to Israel surplus defense items that are stockpiled in Israel and intended for use as Israeli reserve stocks. This amendment reportedly will increase the value of U.S. materiel stored in Israel from \$800 million to \$1.2 billion.<sup>43</sup>

<sup>41</sup> “U.S.- Israel Strategic Link: Both Sides Take Stock,” *New York Times*, October 2, 1981.

<sup>42</sup> “US may give Israel Iraq Ammo,” *Jerusalem Post*, February 11, 2010.

<sup>43</sup> “US to boost weapons stockpile in Israel,” *Agence France Presse*, November 11, 2010.

## Aid Restrictions and Possible Violations

### Cluster Munitions

Although U.S. assistance to Israel has remained high for several decades, the United States has sometimes restricted aid or rebuked Israel for possible improper use of U.S.-supplied military equipment. The 1952 Mutual Defense Assistance Agreement and subsequent arms agreements between Israel and the United States limit the use of U.S. military equipment to defensive purposes.<sup>44</sup> The Arms Export Control Act states that the United States may stop aid to countries which use U.S. military assistance for purposes other than “legitimate self-defense.” In 1982, the Reagan Administration determined that Israel “may” have violated its 1952 Mutual Defense Assistance Agreement with the United States by reportedly using U.S.-supplied anti-personnel cluster bombs against civilian targets during its military operations in Lebanon and the siege of Beirut.<sup>45</sup> As a result, the Reagan Administration prohibited U.S. export of cluster bombs to Israel for six years.<sup>46</sup>

During the July-August 2006 war in Lebanon, Israel used cluster munitions to counter Hezbollah rocket attacks. The United States apparently had supplied some of the cluster weapons that Israel used in the conflict.<sup>47</sup> Since the August 2006 Israeli-Hezbollah cease-fire, there have been a number of reported Lebanese civilian deaths and injuries from unexploded bomb remnants spread across a wide area of southern Lebanon.<sup>48</sup> To date, more than 50 people have been killed by cluster bomb explosions in southern Lebanon since the 2006 war. After the war, the U.S. Department of State’s Office of Weapons Removal and Abatement implemented a landmine and unexploded ordnance (UXO) humanitarian clearance program in Lebanon.

The Department of State’s Directorate of Defense Trade Controls reportedly conducted an investigation focused on whether Israel violated confidential agreements with the United States that restrict Israel’s use of U.S.-supplied cluster munitions to certain military targets in non-civilian areas. On January 28, 2007, the State Department issued a preliminary report to Congress concluding that Israel may have violated the terms of those agreements.<sup>49</sup> The State Department

<sup>44</sup> See, CRS Report R42385, *U.S. Defense Articles and Services Supplied to Foreign Recipients: Restrictions on Their Use*, by Richard F. Grimmett

<sup>45</sup> See, CRS Report R42385, *U.S. Defense Articles and Services Supplied to Foreign Recipients: Restrictions on Their Use*, by Richard F. Grimmett

<sup>46</sup> The Reagan Administration also temporarily suspended the delivery of F-16 aircraft to Israel after it bombed the Iraqi nuclear reactor at Osirak in 1981.

<sup>47</sup> David S. Cloud, “Inquiry Opened Into Israeli Use Of U.S. Bombs,” *New York Times* August 25, 2006. An August 26, 2006 presentation by United Nations Mine Action Coordination Center (UNMAS) South Lebanon office catalogued the following numbers of U.S.-manufactured cluster weapon sub-munitions during surveys in southern Lebanon (source weapons in parentheses): 715 M-42’s (105-millimeter artillery shells), 820 M-77’s (M-26 rockets), and 5 BLU-63’s (CBU-26 cluster bombs). The UNMAS teams also reported 631 M-85 Israeli-produced sub-munitions had been found. See, UNMAS South Lebanon, “Cluster Bomb Situation - South Lebanon July/August 2006,” August 26, 2006.

<sup>48</sup> According to the United Nations Mine Action Coordination Center (UNMACC), between 30% and 40% of Israeli-dropped cluster bombs failed to explode on impact. Israel claims that the “dud rate” was less than 15%.

<sup>49</sup> “U.S. Says Israel May Have Violated Agreement on Cluster Bomb Use,” *Reuters*, January 29, 2007.

then asked Israel for additional information on reports that Israeli troops had violated agreements that restricted how U.S.-manufactured cluster bombs could be used.<sup>50</sup>

Israel has conducted several investigations into its use of cluster munitions in the 2006 war in Lebanon. In December 2007, the Israel Defense Forces (IDF) concluded its investigation, stating that “It was clear that the majority of the cluster munitions were fired at open and uninhabited areas, areas from which Hezbollah forces operated and in which no civilians were present.... The use of this weaponry was legal once it was determined that, in order to prevent rocket fire onto Israel, its use was a concrete military necessity.” The IDF also announced that it would not press charges against officers who ordered the use of cluster bombs during the 2006 war. In February 2008, the Winograd Commission, a government-appointed Israeli commission of inquiry into the events of the 2006 war in Lebanon, concluded that “The facts regarding the use of cluster bombs demonstrated the faults in operational discipline, supervision and control and the lack of clarity of the commands and guidelines just as we had found in other aspects of the war. It is vital that the army learns the lessons that should be apparent from the use of cluster bombs during the war.”<sup>51</sup>

In 2008, after several internal Israeli investigations and Congressional action<sup>52</sup> to attempt to restrict the overall export of U.S. cluster munitions, Israel announced that it would begin purchasing Israeli-made M85 cluster bombs rather than U.S.-manufactured bomblets.<sup>53</sup> Israel Military Industries (IMI) developed the M85 which it claims is more reliable than U.S.-made cluster munitions.<sup>54</sup> However, one Norwegian study asserted that the failure rate on the M85 was closer to 10% and not 1% as claimed by its proponents.<sup>55</sup>

## **Israeli Arms Transfers to Third Parties**

As previously mentioned, Israel has become a global leader in arms exports<sup>56</sup> and, over the last two decades, the United States and Israel have periodically disagreed over Israeli sales of

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<sup>50</sup> “Israel May have Violated Arms Pact, U.S. Says,” *New York Times*, January 28, 2007.

<sup>51</sup> “Army Urged to Review Inadequate Cluster Bomb Rules,” *Jerusalem Post*, January 31, 2008.

<sup>52</sup> The Consolidated Appropriations Act, 2008 (P.L. 110-161), enacted on December 26, 2007, significantly restricted the export of U.S.-manufactured cluster munitions. On September 6, 2007, President George W. Bush objected to efforts by lawmakers to ban the export of cluster munitions. In a statement of Administration policy, the President wrote, “The Administration also objects to restrictions on providing military assistance for cluster munitions.... Currently, the sales of cluster munitions are subject to safeguards. See, “Statement of Administration Policy, H.R. 2764—State, Foreign Operations, and Related Programs Appropriations Act, 2008,” Office of Management and Budget, September 6, 2007. Restrictions on cluster munitions exports have been carried forward to apply to appropriations in subsequent years as well. Section 7054(b) of the Consolidated Appropriations Act, 2012 (P.L. 112-74) provides: “No military assistance shall be furnished for cluster munitions, no defense export license for cluster munitions may be issued, and no cluster munitions or cluster munitions technology shall be sold or transferred, unless— (1) the submunitions of the cluster munitions, after arming, do not result in more than 1 percent unexploded ordnance across the range of intended operational environments; and (2) the agreement applicable to the assistance, transfer, or sale of such cluster munitions or cluster munitions technology specifies that the cluster munitions will only be used against clearly defined military targets and will not be used where civilians are known to be present or in areas normally inhabited by civilians.”

<sup>53</sup> “Israel switches from U.S. cluster bombs, buys local,” *Reuters*, September 30, 2008.

<sup>54</sup> “IDF testing ‘safer’ type of cluster bombs,” *Jerusalem Post*, June 25, 2010.

<sup>55</sup> M85, Analysis of Reliability, Available online at <http://www.npaid.org/filestore/M85.pdf>.

<sup>56</sup> Israel’s customers include Germany, Spain, France, Canada, Australia, Turkey, Singapore, South Korea, Brazil, India, Italy, the Netherlands, Poland and Romania.

sensitive U.S. and Israeli technologies to third party countries, most notably China.<sup>57</sup> In the late-1990s, the Office of Naval Intelligence (ONI) reported that China had acquired U.S. technology “through Israel in the form of the Lavi fighter and possibly SAM [surface-to-air missile] technology,”<sup>58</sup> although Chinese and Israeli officials have repeatedly denied sharing such technology. In 2000, Representative Sonny Callahan, then-Chairman of the House Appropriations Subcommittee on Foreign Operations, sought to withhold \$250 million in aid to Israel unless it cancelled a planned sale to China of an Airborne Early Warning System.<sup>59</sup> On June 20, 2000, the House Foreign Operations Subcommittee voted nine to six to defeat Callahan’s proposal.<sup>60</sup> In 2005, the United States suspended Israel from participating in the development of the Joint Strike Fighter (JSF) and imposed other restrictions in defense ties because of Israeli plans to upgrade Chinese Harpy Killer drone aircraft. Israel ultimately canceled the sale. As of 2005, Israel was reportedly China’s second major arms supplier, after Russia.<sup>61</sup>

U.S. restrictions effectively have curtailed almost all Israeli arms sales to China.<sup>62</sup> Over the past year, Israeli-Chinese military officials exchanged visits, in what some observers believe was an attempt by both countries to slowly expand bilateral relations.<sup>63</sup> China has already become one of Israel’s primary economic (non-military) trading partners, serving as Israel’s second or third largest export market.<sup>64</sup> According to one analyst, “Militarily, China is interested not only in original technologies but also in broader knowledge, and Israel, with its vast operational experience, is viewed by China as an authoritative source.... As for the transmission of military

<sup>57</sup> According to one former State Department intelligence analyst, “We started having a problem with Israel in the 1990s, especially after the 1996 Chinese missile threats against Taiwan when we got the feeling that China’s ballistic missile technology was modernizing way too fast.” See, “U.S.-Israeli Defense Technology Teamwork Began With Confrontation,” *Washington Times*, May 24, 2011.

<sup>58</sup> ONI, *Worldwide Challenges to Naval Strike Warfare*, 1996. The 1997 edition of this report said that the design for China’s J-10 fighter (also known as the F-10—the designation used in the report) “had been undertaken with substantial direct assistance, primarily from Israel and Russia, and with indirect assistance through access to U.S. technologies.” ONI, *Worldwide Challenges to Naval Strike Warfare*, 1997. See also Robert Hewson, “Chinese J-10 ‘benefited from the Lavi project,’” *Jane’s Defence Weekly*, May 16, 2008; Duncan L. Clarke and Robert J. Johnston, “U.S. Dual-Use Exports to China, Chinese Behavior, and the Israel Factor: Effective Controls?” *Asian Survey*, Vol. 39, No. 2, March-April 1999. The Lavi fighter (roughly comparable to the U.S. F-16) was developed in Israel during the 1980s with approximately \$1.5 billion in U.S. assistance, but did not get past the prototype stage.

<sup>59</sup> Eric Pianin, “Israel-China Radar Deal Opposed,” *Washington Post*, April 7, 2000.

<sup>60</sup> According to the House Committee, “the Committee is very disturbed by reports that Israel is preparing to provide China with an airborne radar system that could threaten both the forces of democratic Taiwan and the United States in the region surrounding the Taiwan Strait. The Committee intends to revisit this issue as the appropriations process moves forward.” H.Rept. 106-720, accompanying H.R. 4811 (P.L. 106-429), the FY2001 Foreign Operations Appropriations Act.

<sup>61</sup> Ron Kampeas, “Israel-U.S. Dispute on Arms Sales to China Threatens to Snowball,” *Jewish Telegraphic Agency*, June 8, 2005, citing a U.S.-China Economic and Security Review 2004 report.

<sup>62</sup> According to one report, since U.S. restrictions on Israeli sales to China were put in place, “Washington has approved only a few, non-offensive, homeland security-related sales to China.” See, “Israel-China Revive Military Ties, But Not Defense Trade,” *Defense News*, August 17, 2011.

<sup>63</sup> In June 2011, Israeli Defense Minister Ehud Barak visited China, following a May 2011 visit from Chinese Admiral Wu Shengli. According to one Israeli defense official, “We are trying to explain to the Chinese the severity of the Iranian nuclear threat and to get better co-operation.” Then in August 2011, General Chen Bingde, chief of General Staff of the People’s Liberation Army, visited Israel for consultations with Israeli officials. See, Yoram Evron, “The Chinese Chief of Staff Visits Israel: Renewing Military Relations?” *INSS Insight*, No. 275, August 17, 2011.

<sup>64</sup> “China now Israel’s third-largest destination for exports,” *Jerusalem Post*, November 24, 2011. According to one report, bilateral trade reached a record high of \$7.5 billion in the January-November period of 2011, surpassing the \$6.8b. recorded for the full year of 2010. See, “Israel and China - Toward the next 20 years,” *Jerusalem Post*, January 24, 2012.

technologies, China with its political experience and patience may assume that current export limitations could one day be lifted, and may therefore continue to raise the issue on different occasions.”<sup>65</sup>

In order to create a more transparent arms transfer process, former U.S. Defense Secretary Donald Rumsfeld and former Israeli Defense Minister Shaul Mofaz signed a 2005 bilateral agreement mandating Israeli consultation with the U.S. government on sensitive arms transfers to third parties. The Israeli government also has established its own arms export controls agency to supervise military sales. On August 17, 2005, DoD and the Israeli Ministry of Defense issued a joint press statement reporting that they had signed an understanding “designed to remedy problems of the past that seriously affected the technology security relationship and to restore confidence in the technology security area. Sources have reported that this understanding has given the United States de facto veto power over Israeli third-party arms sales that the United States deems harmful to its national security interests.”<sup>66</sup> In June 2005, the Israeli newspaper *Ha’aretz* reported that Israel would voluntarily adhere to the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies, without actually being a party to it.<sup>67</sup>

On July 17, 2007, the Israeli Knesset passed a Law on Control of Defense Exports that established a new authority in the Defense Ministry to oversee defense exports—involving the Foreign Ministry in the process for the first time. As a result, the United States agreed to establish a High Technology Forum to institutionalize senior-level U.S.-Israel dialogue to address bilateral high technology trade, investment, and related issues.

In late 2008, the United States reportedly refused to approve an Israeli sale to Russia of up to 100 Heron drones that contain U.S. parts, and the Israeli Defense Exports Control Directorate (DECD) was said to have heightened scrutiny of all defense exports to Russia.<sup>68</sup> In 2010, the United States resumed discussions with Israel over a possible Heron sale to Russia. Reports indicate that Israel Aerospace Industries and Russian arms maker Oboronprom signed a \$400 million joint venture agreement in October 2010 for the manufacture of Heron-1 reconnaissance drones at a facility in Russia, possibly beginning in mid-2011. These reports indicate that Russia’s cancellation of a sale of S-300 surface-to-air missile systems to Iran may have revived the Heron deal, but that the Herons are to be used only for homeland security purposes. Russia reportedly wants the opportunity to acquire and possibly manufacture the Heron TP drone, which has more advanced capabilities and can fire air-to-surface missiles. In November 2010, Israel delivered 12

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<sup>65</sup> “Israel seeks rapport with China over Iran,” *Jane’s Defence Weekly*, June 16, 2011.

<sup>66</sup> “U.S. OKs Israel-China Spy Sat Deal,” *DefenseNews.com*, October 12, 2007. This article quotes a U.S. official as saying, “We don’t officially acknowledge our supervisory role or our de facto veto right over their exports.... It’s a matter of courtesy to our Israeli friends, who are very serious about their sovereignty and in guarding their reputation on the world market.”

<sup>67</sup> Ze’ev Schiff, *et al.*, “Bowling to U.S. pressure, Israel to curb arms deals,” *Ha’aretz*, June 26, 2005. The participants to the Wassenaar Arrangement have agreed to (1) maintain national export controls on certain conventional arms and dual-use goods and technologies, (2) report on transfers and denials of specified controlled items to destinations outside the Arrangement, and (3) exchange information on sensitive dual-use goods and technologies. Participants include the United States and 39 other countries (including Russia, Japan, South Korea, Australia, New Zealand, South Africa, Canada, and most European countries). More information is available at <http://www.wassenaar.org/>.

<sup>68</sup> Nadav Ze’evi, “Israel Holds Up Sale of UAV’s to Russia under US Pressure,” *Ma’ariv*, March 5, 2009, BBC Monitoring Middle East, March 6, 2009.

shorter-range drones to Russia in connection with a 2009 agreement reached to address Russia's procurement priorities in the wake of its 2008 war with Georgia.<sup>69</sup>

## Other Ongoing Assistance and Cooperative Programs

### Migration & Refugee Assistance

Since 1973, Israel has received grants from the State Department's Migration and Refugee Assistance fund (MRA)<sup>70</sup> to assist in the resettlement of migrants to Israel. 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.<sup>71</sup> Between 1973 and 1991, the United States gave about \$460 million for resettling Jewish refugees in Israel. Annual amounts have varied from a low of \$12 million to a high of \$80 million, based on the number of Jews leaving the former Soviet Union and other areas for Israel. The Migration and Refugee funds for Israel are earmarked by Congress; the Administration usually does not request specific amounts of Migration and Refugee assistance for Israel.

**Table 2. Migration and Refugee Assistance Funding Levels**

FY2000:	\$60 million
FY2001:	\$60 million
FY2003:	\$60 million
FY2004:	\$59.6 million
FY2005:	\$49.7 million
FY2006:	\$50 million
FY2007:	\$40 million
FY2008:	\$40 million
FY2009:	\$30 million
FY2010:	\$25 million
FY2011:	\$25 million
FY2012	\$20 million
FY2013 Request	\$15 million

**Source:** U.S. State Department.

**Note:** The level of funding reflects a decline in need due to the decreasing numbers of migrants to Israel.

<sup>69</sup> The sources for the material in most of this paragraph are "Procurement, Russian Federation," *Jane's Sentinel Security Assessment—Russia and the CIS*, January 29, 2012; Spencer Ackerman, "Will Israel Sell Russia Its Prized Monster Drone?" *Wired.com*, January 18, 2011.

<sup>70</sup> The Migration and Refugee Account (MRA) is authorized as part of the State Department funding but is appropriated through the Foreign Operations Appropriations bill.

<sup>71</sup> The Jewish Agency for Israel's website is available at <http://www.jafi.org.il/>.



Congress has changed the 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 between “refugees” and other immigrants, and the funds are used to support the absorption of all 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 sparked by a Palestinian uprising (known as the second intifada). Loan guarantees are a form of indirect U.S. assistance to Israel, since they enable Israel to borrow from commercial sources at lower rates. Congress directs that subsidies be set aside in a U.S. Treasury account for possible default. These subsidies, which are a percentage of the total loan (based in part on the credit rating of the borrowing country; in the case of the loan guarantees in the 1990s, the subsidy amount was 4.1%), have come from the U.S. or the Israeli government. Israel has never defaulted on a U.S.-backed loan guarantee, as it needs to maintain its good credit rating in order to secure financing to offset annual budget deficits.

### **Loan Guarantees for Economic Recovery**

In 2003, then Prime Minister Ariel Sharon requested an additional \$8 billion in loan guarantees to help Israel’s 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, borders; that the annual loan guarantees could be reduced by an amount equal to the amount Israel spends on settlements in the occupied territories; 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. On November 26, 2003, the Department of State announced that the \$3 billion loan guarantees for FY2003 were reduced by \$289.5 million because Israel continued to build settlements in the occupied territories and continued construction of the security barrier separating Israelis and Palestinians. In FY2005, the U.S. government further reduced the amount available for Israel to borrow by an additional \$795.8 million. Since then, no other deductions have been made.

According to the U.S. Treasury Department, Israel is legally obligated to use the proceeds of guaranteed loans for refinancing its government debt and also has agreed that proceeds shall not be used for military purposes or to support activities in areas outside its pre-June 5, 1967 borders (the West Bank—including East Jerusalem—and Gaza). However, U.S. officials note that since

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.<sup>72</sup>

P.L. 108-447, the FY2005 Consolidated Appropriations Act, first extended the authority of the loan guarantees from FY2005 to FY2007. In the aftermath of the 2006 Israel-Hezbollah conflict, President Bush stated that he would ask Congress to again extend the authorization of loan guarantees to Israel. P.L. 109-472, the 2006 Department of State Authorities Act, extended the authority to provide loan guarantees through FY2011. Israel has not borrowed any funds since FY2005. 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. Israeli officials may believe that although they have not needed to use the loan guarantees in the last seven years, maintaining the program boosts the country's fiscal standing among international creditors in capital markets.

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<sup>72</sup> CRS correspondence with the U.S. Treasury Department's Office of International Affairs, October 2009.

**Table 3. U.S. Loan Guarantees to Israel: FY2003-FY2011**  
( current \$ in millions)

Fiscal Year	Amount Authorized and Allocated to Israel	Met U.S. Economic Reform Benchmarks? <sup>a</sup>	Deductions for Settlement Activity	Amount Borrowed by Israel	Amount Available for Israel to Borrow <sup>b</sup>
FY2003	3,000.0	Yes	289.5	1,600.0	1,110.5
FY2004	3,000.0	Yes	—	2,500.0	1,610.5
FY2005	1,000.0	Yes	795.8	—	1,814.7
FY2006	333.0	Conditions Waived due to war in Lebanon	—	—	2,148.0
FY2007	333.0	Yes	—	—	2,481.4
FY2008	333.0	Yes	—	—	2,814.7
FY2009	333.0	Conditions Waived due to global economic crisis	—	—	3,148.0
FY2010	333.0	n/a	—	—	3,481.0
FY2011	333.0	n/a	—	—	3,814.0

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

- a. The United States and Israel have agreed that guarantees are not automatically available for use by Israel after they are authorized by the United States: per a June 2009 agreement, the United States must give written determination of the fulfillment (or waiver) of conditions before it releases tranches for use by Israel. The U.S.-Israel Joint Economic Development Group (JEDG) establishes benchmarks for Israel. These benchmarks contain conditions for deficit and spending caps, along with other fiscal and non-fiscal conditions.
- b. Under current legislation, the loan guarantee program has a stated end of September 30, 2011; however, there is also a “carryover” provision in the statute under which Israel may draw on unused U.S. guarantees until September 30, 2012.

The current authorization of Israel’s loan guarantee program will expire at the end of FY2012. A 2011 internal report by the State Department’s Office of Inspector General recommended that the loan guarantee program be terminated.<sup>73</sup> According to an excerpt of the report published by *Ha’aretz*, “Planning should begin now for [the loan-guarantee program’s] orderly termination.... Israel has been admitted to the Organization for Economic Cooperation and Development, an indication that it is now a modern, self-sufficient economy capable of supporting its citizens as an industrialized country. The OIG team found a broad consensus that the loan guarantee program can prudently be terminated in accordance with the sunset clause in the original legislation, which provided that it would end by 2011.” However, according to a more recent report in Israel’s *Ha’aretz* newspaper, the Obama Administration may seek a three-year extension of the program from Congress.<sup>74</sup> Israel currently is authorized to borrow \$3.8 billion in loan guarantees. According to one Israeli official, “We consider the loan guarantees as preparation for a rainy

<sup>73</sup> “U.S. report recommends ending loan guarantees to Israel at end of 2011,” *Ha’aretz*, July 28, 2011.

<sup>74</sup> “U.S. to grant three-year extension of loan guarantees to Israel,” *Ha’aretz*, January 25, 2012.

day.... This is a safety net for war, natural disaster and economic crisis, which allows Israel to maintain economic stability in unstable surroundings.”<sup>75</sup>

## American Schools and Hospitals Abroad Program (ASHA)<sup>76</sup>

Through Foreign Operations appropriations legislation, 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 Israeli universities and hospitals have been recipients of ASHA grants. Over the past several years, institutions in Israel such as Nazareth Hospital, Shaare Zedek Medical Center in Jerusalem, The Feinberg Graduate School of the Weizmann Institute of Science, the Sackler Faculty of Medicine of the Tel Aviv University, The Hebrew University of Jerusalem, the Hadassah Medical Organization, and the Sanz Medical Center-Laniado Hospital have received ASHA funding. The Hadassah Medical Organization was nominated for the 2005 Nobel Peace Prize for its equitable treatment of Palestinians and Israeli patients. According to USAID, institutions based in Israel have received the most program funding in the Middle East region.

**Table 4. ASHA Program Grants from Israel Account, FY2000-FY2011**

Fiscal year	Amount
FY2000	\$2.75 million
FY2001	\$2.25 million
FY2002	\$2.65 million
FY2003	\$3.05 million
FY2004	\$3.15 million
FY2005	\$2.95 million
FY2006	\$3.35 million
FY2007	\$2.95 million
FY2008	\$3.90 million
FY2009	\$3.90 million
FY2010	\$3.80 million
FY2011	\$4.225 million
<b>Total</b>	<b>\$38.925 million</b>

Source: USAID.

<sup>75</sup> Ibid.

<sup>76</sup> 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 for 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/](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 high technology sector. At the time, Israel's nascent technology sector, which would later become the driving force in Israel's economy, was in need of private capital for research and development. 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 the following organizations:

- The BIRD Foundation (Israel-U.S. Binational Research & Development Foundation).<sup>77</sup> 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 (non-defense) industrial R&D of mutual benefit to..." the two countries.<sup>78</sup> Projects are supported in the areas of homeland security, communications, electronics, electro-optics, software, life sciences, and renewable and alternative energy, among others.<sup>79</sup> According to the Foundation, \$282 million in grants have been awarded to 813 projects. While support for military projects are not a part of the program, several of the completed ventures have yielded products that might be useful in a military setting, including the Aircraft Enhanced Vision System (EVS) camera, "which is designed to provide day/night improved orientation during taxiing or flying. It allows visual landing in reduced visibility conditions, such as fog, haze, dust, smog etc." The Foundation also funded the creation of a Through-Wall Location and Sensing System that is portable and "detects whether people are present behind walls, how many, and where they are situated."<sup>80</sup>
- The BSF Foundation (U.S.-Israel Binational Science Foundation).<sup>81</sup> BSF, which was started in 1972, promotes cooperation in scientific and technological research.
- The BARD Foundation (Binational Agriculture and Research and Development Fund). BARD was created in 1978 and supports U.S.-Israeli cooperation in agricultural research.<sup>82</sup>

<sup>77</sup> See <http://www.birdf.com/default.asp>. Congress helped establish BIRD's endowment with appropriations of \$30 million and \$15 million in 1977 and 1985, respectively. These grants were matched by the Israeli government for a total endowment of \$90 million.

<sup>78</sup> Eitan Ydilevich, "Building U.S.-Israel Economic Partnerships, The BIRD Model," Washington, D.C. June 10, 2010, 2.

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

<sup>80</sup> Information from the BIRD Foundation Website available at <http://www.birdf.com>.

<sup>81</sup> See <http://www.bsf.org.il/Gateway4/>. Congress helped establish BSF's endowment with appropriations of \$30 million and \$20 million in 1972 and 1984 respectively. These grants were matched by Israel for a total endowment of \$100 million. 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.

<sup>82</sup> See <http://www.bard-isus.com/>. Congress helped establish BARD's endowment with appropriations of \$40 million and \$15 million in 1979 and 1985 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.

- 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)<sup>83</sup>, 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.

Section 917 of P.L. 110-140, the Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007, contains the original language of the U.S.-Israel Energy Cooperation Act (H.R. 1838). Although it does not appropriate any funds for joint research and development, it does establish a grant program to support research, development, and commercialization of renewable energy or energy efficiency. The law also authorizes the Secretary of Energy to provide funds for the grant program as needed.

Congress appropriates funds for the U.S.-Israeli Energy Cooperation Program in the annual Energy and Water Development and Related Agencies Appropriations bill. In FY2009, Congress provided \$2 million for the program in P.L. 111-8, the Omnibus Appropriations Act, 2009.<sup>84</sup> In FY2010, Congress provided an additional \$2 million in P.L. 111-85, the Energy and Water Development and Related Agencies Appropriations Act, 2010.

In November 2009, the U.S. Department of Energy and the Israeli Ministry of National Infrastructures announced that they would each contribute \$3.3 million to the BIRD Foundation to launch four clean energy projects. The projects include two solar power related technologies, a “smart grid” technology and a biodiesel project.

In January 2010, the Israeli government injected an additional \$55 million into the BIRD, BSF, and BARD foundations. According to former Israeli Finance Minister Yuval Steinitz, “This is a significant and important step for strengthening economic and technological ties with the United States and for capital inflows to Israeli innovation.... We hope that in the wake of this step, we will find more opportunities for achieving these targets.”

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<sup>83</sup> The U.S.-Israel Science and Technology Commission (USISTC) was established in 1993 to facilitate cooperative ventures between high tech industries in both 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.

<sup>84</sup> P.L. 111-8 did not specify an amount for the program but adopted the House version of the energy and water appropriations bill that recommended \$2 million to fund the U.S.-Israeli cooperative agreement. The Senate version had recommended \$5 million for FY2009.

## Appendix A. Historical Background

### 1948-1970

U.S. government assistance to Israel began in 1949 with a \$100 million Export-Import Bank Loan.<sup>85</sup> For the next two decades, U.S. aid to Israel was modest and was far less than in later years.<sup>86</sup> Although the United States provided moderate amounts of economic aid (mostly loans), Israel's main early patron was France, which provided Israel with advanced military equipment and technology.<sup>87</sup> In 1962, Israel purchased its first advanced weapons system from the United States (Hawk anti-aircraft missiles).<sup>88</sup> In 1968, a year after Israel's victory in the Six Day War, the Johnson Administration, with strong support from Congress, approved the sale of Phantom aircraft to Israel, establishing the precedent for U.S. support for what later came to be referred to as Israel's qualitative military edge over its neighbors.<sup>89</sup>

### 1970-Present

Large-scale U.S. assistance for Israel increased considerably after several consecutive Arab-Israeli wars in the late 1960s and early 1970s created a sense among many Americans that Israel was continually under siege.<sup>90</sup> Consequently, Congress, supported by broad U.S. public opinion, committed to strengthening Israel's military and economy through large increases in foreign aid. From 1966 through 1970, average aid per year increased to about \$102 million and military loans increased to about 47% of the total. In 1971, the United States provided Israel with military loans of \$545 million, up from \$30 million in 1970. Also in 1971, Congress first designated a specific amount of aid for Israel in legislation (an "earmark"). Economic assistance changed from project aid, such as support for agricultural development work, to a Commodity Import Program (CIP) for the purchase of U.S. goods.<sup>91</sup> In effect, the United States stepped in to fill the role that France had relinquished when French President Charles de Gaulle refused to supply Israel with military hardware to protest its preemptive launch of the Six Day War in June 1967. Israel became the largest recipient of U.S. foreign assistance in 1974, and has only been superseded at various times by Iraq and Afghanistan in the past decade because of short-term U.S. aid aimed at building those

<sup>85</sup> In 1948, President Harry Truman, who sympathized with the plight of Israel in its early days and recognized its statehood over the objections of some of his top advisors, placed an arms embargo on Israel and her Arab neighbors in order to keep the United States neutral in the ongoing Arab-Israeli conflict. The Tripartite Declaration of 1950 reaffirmed U.S., British, and French opposition to the development of Arab-Israeli arms races.

<sup>86</sup> From 1949 through 1965, U.S. aid to Israel averaged about \$63 million per year, over 95% of which was economic development assistance and food aid. A modest military loan program began in 1959.

<sup>87</sup> France supplied Israel with military equipment mainly to counter Egypt. In the 1950s and early 1960s, Egypt antagonized France by providing arms and training for Algeria's war for independence against France.

<sup>88</sup> "America's Staunchest Mideast Ally," *Christian Science Monitor*, August 21, 2003.

<sup>89</sup> Section 303 of P.L. 90-554, *Foreign Assistance Act of 1968*, expresses the sense of Congress to see the United States negotiate the sale of supersonic aircraft to Israel.

<sup>90</sup> Between 1967 and 1973, Israel and its Arab neighbors fought the June 1967 War, the ensuing War of Attrition (1969), and the October 1973 War. Israel also was engaged in low level guerrilla warfare with the Palestinian Liberation Organization and other groups, which had bases in Jordan and later in Lebanon. The 1974 emergency aid for Israel, following the 1973 war, included the first U.S. military grant aid to Israel.

<sup>91</sup> The Commodity Import Program for Israel ended in 1979 and was replaced with direct, largely unconditional cash transfers.

countries' indigenous security capabilities. From 1971 to the present, U.S. aid to Israel has averaged over \$2.6 billion per year, two-thirds of which has been military assistance.

## The 1979 Israeli-Egyptian Peace Treaty

The 1979 Camp David Peace Treaty between Israel and Egypt ushered in the current era of U.S. financial support for peace between Israel and its Arab neighbors. To facilitate a full and formal cessation of hostilities and Israel's return of the Sinai Peninsula to Egypt, the United States provided a total of \$7.5 billion to both parties in 1979. The "Special International Security Assistance Act of 1979" (P.L. 96-35) provided military and economic grants to Israel and Egypt at a ratio of 3:2, respectively.<sup>92</sup>

## Emergency Aid

U.S. assistance also has been used to help ease financial pressures on the Israeli treasury during recession.<sup>93</sup> In 1985, the United States significantly increased U.S. assistance to Israel, with Congress passing a special economic assistance package of \$1.5 billion in order to help the Israeli economy cope with soaring inflation and economic stagnation.<sup>94</sup> As part of the assistance agreement, the United States and Israel formed the U.S.-Israel Joint Economic Development Group (JEDG) to support Israeli economic reforms.<sup>95</sup> In addition, U.S. economic aid was converted to a cash grant transfer in 1981, and all U.S. military aid to Israel was converted from loans into grants in 1985.<sup>96</sup>

During difficult times for Israel, U.S. aid to Israel has increased. In 1991, Congress provided Israel \$650 million in emergency grants to pay for damage and other costs from Operation Desert Storm, as well as Patriot missiles to defend against Iraqi Scud missile attacks. After the 1991 collapse of the Soviet Union and the ensuing increase in migration of Russian and other Eastern bloc Jews to Israel, Congress approved \$10 billion in loan guarantees for Israel to help it absorb immigrants and provide them with adequate social services. Finally, in the aftermath of the 2003 Iraq invasion, Congress passed the FY2003 Emergency Supplemental Appropriations Act (P.L. 108-11), which included \$9 billion in loan guarantees over three years for Israel's economic recovery and \$1 billion in military grants.

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<sup>92</sup> This ratio is not found in the text of the 1978 and 1979 Camp David agreements. U.S. officials have not formally recognized the ratio. Egypt believes that, since it took political risks in making peace with Israel, the United States should be even-handed in its assistance policy to the region. The Egyptian government claims that a 3:2 ratio between Israel and Egypt was established during the negotiations.

<sup>93</sup> Beginning in the mid-1970s, Israel could no longer meet its balance of payments and government deficits with imported capital (gifts from overseas Jews, West German reparations, regular U.S. aid) and began to rely more on borrowed capital. Growing debt servicing costs, mounting government social services expenditures, perennial high defense spending, and a stagnant domestic economy combined with worldwide inflation and declining foreign markets for Israeli goods to push the Israeli economy into a near crisis situation in the mid-1980s.

<sup>94</sup> See Title I, Chapter V of P.L. 99-88, Economic Support Fund Assistance for Israel, Egypt, and Jordan. In 1985, the United States and Israel also concluded a Free Trade Agreement, which dramatically boosted Israeli exports to the United States.

<sup>95</sup> The JEDG meets on an annual basis to discuss financial sector and labor market reforms, trade liberalization, and privatization. The JEDG also monitors the disbursement of U.S. loan guarantees to Israel.

<sup>96</sup> The 1974 emergency aid for Israel, following the 1973 war, included the first military grant aid.



## **Using Aid to Support the Peace Process**

During the 1990s, the United States provided aid to support the Israeli-Palestinian peace process. In late 1998, Israel requested \$1.2 billion in additional U.S. aid to fund the movement of troops and military installations out of areas of the West Bank as called for in the October 23, 1998 Wye Agreement.<sup>97</sup> The Clinton Administration requested \$1.2 billion in military aid for Israel to implement the Wye Agreement despite the fact that its implementation had stalled. President Clinton vetoed H.R. 2606, the FY2000 foreign operations appropriations bill, in part because it did not include the Wye funding. On November 29, 1999, the President signed the consolidated appropriations bill, H.R. 3194 (P.L. 106-113), which included in Division B passage of H.R. 3422, the Foreign Operations Appropriations bill. Title VI of H.R. 3422 included the \$1.2 billion Wye funding for Israel.

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<sup>97</sup> The full text of the 1998 Wye River Memorandum, a U.S.-brokered Israeli-Palestinian security agreement, is available online at <http://www.mfa.gov.il/NR/exeres/EE54A289-8F0A-4CDC-93C9-71BD631109AB.htm>.

## Appendix B. Bilateral Aid to Israel

**Table B-1** shows cumulative U.S. aid to Israel for FY1949 through FY1996, and U.S. aid to Israel for each fiscal year since. Detail for the years 1949-1996 is shown in **Table B-2**.

**Table B-1. Recent U.S. Bilateral Aid to Israel**  
(millions of dollars)

Year	Total	Military Grant	Economic Grant	Immig. Grant	ASHA	All other
1949-1996	68,030.9	29,014.9	23,122.4	868.9	121.4	14,903.3
1997	3,132.1	1,800.0	1,200.0	80.0	2.1	50.0
1998	3,080.0	1,800.0	1,200.0	80.0	—	—
1999	3,010.0	1,860.0	1,080.0	70.0	—	—
2000	4,131.85	3,120.0	949.1	60.0	2.75	—
2001	2,876.05	1,975.6	838.2	60.0	2.25	—
2002	2,850.65	2,040.0	720.0	60.0	2.65	28.0
2003	3,745.15	3,086.4	596.1	59.6	3.05	—
2004	2,687.25	2,147.3	477.2	49.7	3.15	9.9
2005	2,612.15	2,202.2	357.0	50.0	2.95	—
2006	2,534.5	2,257.0	237.0	40.0	—	0.5
2007	2,503.15	2,340.0	120.0	40.0	2.95	0.2
2008	2,423.9	2,380.0	0	40.0	3.90	0
2009	2,583.9	2,550.0	0	30.0	3.90	0
2010	2,803.8	2,775.0	0	25.0	3.80	0
2011	3,029.22	3,000.0	0	25.0	4.225	0
2012	3,095.0	3,075.0	0	20.0	—	0
2013	3,115.0	3,100.0	0	15.0	—	0
Request						
<b>Total</b>	<b>115,129.57</b>	<b>67,423.4</b>	<b>30,897.0</b>	<b>1,658.2</b>	<b>159.075</b>	<b>14,991.9</b>

**Notes:** ESF was earmarked for \$960 million for FY2000 but was reduced to meet a 0.38% recision. FY2000 military grants include \$1.2 billion for the Wye agreement and \$1.92 billion in annual military aid. Final amounts for FY2003 are reduced by 0.65% mandated recision, and final amounts for FY2004 are reduced by 0.59%.

The \$600 million in housing loan guarantees, \$5.5 billion in military debt reduction loan guarantees, \$9.2 billion in Soviet Jew resettlement loan guarantees, and \$9 billion in economic recovery loan guarantees are not included in the tables because the United States government did not transfer funds to Israel. The United States underwrote loans to Israel from commercial institutions.

**Table B-2. U.S. Assistance to Israel, FY1949-FY1996**

(millions of dollars)

Year	Total	Military Loan	Military Grant	Economic Loan	Economic Grant	FFP Loan	FFP Grant
1949	100.0	-	-	-	-	-	-
1950	-	-	-	-	-	-	-
1951	35.1	-	-	-	0.1	-	-
1952	86.4	-	-	-	63.7	-	22.7
1953	73.6	-	-	-	73.6	-	a
1954	74.7	-	-	-	54.0	-	20.7
1955	52.7	-	-	20.0	21.5	10.8	0.4
1956	50.8	-	-	10.0	14.0	25.2	1.6
1957	40.9	-	-	10.0	16.8	11.8	2.3
1958	85.4	-	-	15.0	9.0	34.9	2.3
1959	53.3	0.4	-	10.0	9.2	29.0	1.7
1960	56.2	0.5	-	15.0	8.9	26.8	4.5
1961	77.9	a	-	16.0	8.5	13.8	9.8
1962	93.4	13.2	-	45.0	0.4	18.5	6.8
1963	87.9	13.3	-	45.0	-	12.4	6.0
1964	37.0	-	-	20.0	-	12.2	4.8
1965	65.1	12.9	-	20.0	-	23.9	4.9
1966	126.8	90.0	-	10.0	-	25.9	0.9
1967	23.7	7.0	-	5.5	-	-	0.6
1968	106.5	25.0	-	-	-	51.3	0.5
1969	160.3	85.0	-	-	-	36.1	0.6
1970	93.6	30.0	-	-	-	40.7	0.4
1971	634.3	545.0	-	-	-	55.5	0.3
1972	430.9	300.0	-	-	50.0	53.8	0.4
1973	492.8	307.5	-	-	50.0	59.4	0.4
1974	2,621.3	982.7	1,500.0	-	50.0	-	1.5
1975	778.0	200.0	100.0	-	344.5	8.6	-
1976	2,337.7	750.0	750.0	225.0	475.0	14.4	a
TQ	292.5	100.0	100.0	25.0	50.0	3.6	-
1977	1,762.5	500.0	500.0	245.0	490.0	7.0	-
1978	1,822.6	500.0	500.0	260.0	525.0	6.8	-
1979	4,888.0	2,700.0	1,300.0	260.0	525.0	5.1	-
1980	2,121.0	500.0	500.0	260.0	525.0	1.0	-
1981	2,413.4	900.0	500.0	-	764.0	-	-
1982	2,250.5	850.0	550.0	-	806.0	-	-

Year	Total	Military Loan	Military Grant	Economic Loan	Economic Grant	FFP Loan	FFP Grant
1983	2,505.6	950.0	750.0	-	785.0	-	-
1984	2,631.6	850.0	850.0	-	910.0	-	-
1985	3,376.7	-	1,400.0	-	1,950.0	-	-
1986	3,663.5	-	1,722.6	-	1,898.4	-	-
1987	3,040.2	-	1,800.0	-	1,200.0	-	-
1988	3,043.4	-	1,800.0	-	1,200.0	-	-
1989	3,045.6	-	1,800.0	-	1,200.0	-	-
1990	3,034.9	-	1,792.3	-	1,194.8	-	-
1991	3,712.3	-	1,800.0	-	1,850.0	-	-
1992	3,100.0	-	1,800.0	-	1,200.0	-	-
1993	3,103.4	-	1,800.0	-	1,200.0	-	-
1994	3,097.2	-	1,800.0	-	1,200.0	-	-
1995	3,102.4	-	1,800.0	-	1,200.0	-	-
1996	3,144.0	-	1,800.0	-	1,200.0	-	-
<b>Total</b>	<b>68,030.9</b>	<b>11,212.5</b>	<b>29,014.9</b>	<b>1,516.5</b>	<b>23,122.4</b>	<b>588.5</b>	<b>94.1</b>

Year	Ex-Im. Bank Loan	Jewish Refug. Resettle Grant	Amer. Schools & Hosp. Grant	Other Loan	Coop. Devel. Grant	Other Grant
1949	100.0	-	-	-	-	-
1950	-	-	-	-	-	-
1951	35.0	-	-	-	-	-
1952	-	-	-	-	-	-
1953	-	-	-	-	-	-
1954	-	-	-	-	-	-
1955	-	-	-	-	-	-
1956	-	-	-	-	-	-
1957	-	-	-	-	-	-
1958	24.2	-	-	-	-	-
1959	3.0	-	-	-	-	-
1960	0.5	-	-	-	-	-
1961	29.8	-	-	-	-	-
1962	9.5	-	-	-	-	-
1963	11.2	-	-	-	-	-
1964	-	-	-	-	-	-
1965	3.4	-	-	-	-	-
1966	-	-	-	-	-	-
1967	9.6	-	1.0	-	-	-

Year	Ex-Im. Bank Loan	Jewish Refug. Resettle Grant	Amer. Schools & Hosp. Grant	Other Loan	Coop. Devel. Grant	Other Grant
1968	23.7	-	6.0	-	-	-
1969	38.6	-	-	-	-	-
1970	10.0	-	12.5	-	-	-
1971	31.0	-	2.5	-	-	-
1972	21.1	-	5.6	-	-	-
1973	21.1	50.0	4.4	-	-	-
1974	47.3	36.5	3.3	-	-	-
1975	62.4	40.0	2.5	-	-	20.0
1976	104.7	15.0	3.6	-	-	-
TQ	12.6	-	1.3	-	-	-
1977	0.9	15.0	4.6	-	-	-
1978	5.4	20.0	5.4	-	-	-
1979	68.7	25.0	4.2	-	-	-
1980	305.9	25.0	4.1	-	-	-
1981	217.4	25.0	2.0	-	5.0	-
1982	6.5	12.5	3.0	17.5	5.0	-
1983	-	12.5	3.1	-	5.0	-
1984	-	12.5	4.1	-	5.0	-
1985	-	15.0	4.7	-	7.0	-
1986	15.0	12.0	5.5	-	10.0	-
1987	-	25.0	5.2	-	10.0	-
1988	-	25.0	4.9	-	13.5	-
1989	-	28.0	6.9	-	10.7	-
1990	-	29.9	3.5	-	14.4	-
1991	-	45.0	2.6	-	14.7	-
1992	-	80.0	3.5	-	16.5	-
1993	-	80.0	2.5	-	20.9	-
1994	-	80.0	2.7	-	14.5	-
1995	-	80.0	2.9	-	19.5	-
1996	-	80.0	3.3	-	14.0	50.0
<b>Total</b>	<b>1218.5</b>	<b>868.9</b>	<b>121.4</b>	<b>17.5</b>	<b>185.7</b>	<b>70.0</b>

**Notes:** a = less than \$50,000

- = None

NA = Not Available

TQ = Transition Quarter, when the U.S. fiscal year changed from June to September.

FFP = Food for Peace

Cooperative Development Grant: Three programs are in the cooperative development category: Middle East Regional Cooperation (MERC) intended for projects that foster economic growth and economic cooperation between Israel and its neighbors; Cooperative Development Program (CDP); and the Cooperative Development

Research (CDR), both of which fund Israel's foreign aid program. Israel received about one half of the \$94 million MERC, and all of the \$53 million CDP and \$39 million CDR.

"Other Loan" is a CCC loan. "Other Grants" are \$20 million in 1975 for a seawater desalting plant and \$50 million in 1996 for anti-terrorism.

Definition of Aid: Under the category of foreign aid, some people include other funds transferred to Israel, such as the \$180 million for research and development of the Arrow missile, or the \$7.9 billion in loan guarantees for housing or settling Soviet Jews in Israel. None of these funds is included in this table.

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