

How Israel Stole the Bomb

Exclusive: When Israel launched a covert scheme to steal material and secrets to build a nuclear bomb, U.S. officials looked the other way and obstructed investigations, as described in a book reviewed by James DiEugenio.

By James DiEugenio

In 1968, CIA Director Richard Helms was presented with a disturbing National Intelligence Estimate (NIE) stating that Israel had obtained atomic weapons, a dangerous development that occurred earlier than the CIA had anticipated.

It was particularly dangerous because just the year before, the Six Day War had marked the beginning of open hostilities between the Israelis and Arab nation states. To prevail, Israel had launched preemptive air attacks against Egypt, Jordan, Syria and Iraq at the start of the conflict. Considering that violent backdrop, Helms immediately arranged a meeting with President Lyndon Johnson to inform him of this troubling milestone.

The man who had prepared the NIE and gave it to Helms was the CIA's chief science and technology officer, Carl Duckett. After Helms met with Johnson, the CIA Director told Duckett about the President's rather odd reaction. LBJ did not get upset, and he did not order an investigation into how it happened. Further, he did not tell Helms to let both the Defense Department and State Department know about it so they could establish intelligence inquiries or consider sanctions.

Instead, Johnson did the opposite. He told Helms to keep the news secret and specifically told the Director *not* to let the secretaries of State or Defense know about it.

Helms obeyed the orders of his Commander in Chief, but he decided to talk to the FBI about how this development had occurred earlier than expected. Thus begins Roger Mattson's *Stealing the Atom Bomb: How Denial and Deception Armed Israel*, the riveting story of duplicity, betrayal, cover-ups and deceit.

As the book shows, the cover-ups and duplicity did not just come from Israel and its agents in America. The deceit also came from men inside the American government who, for whatever reasons, decided to cast a blind eye on what was really happening under their jurisdiction, even after they had been alerted to it.

What Mattson reveals is no less than an atomic heist – one that could have been

prevented if men in high positions had done their duty.

Highly Enriched Uranium

After Johnson told Helms not to tell State or Defense, the CIA Director called Attorney General Ramsey Clark, because what made this news even more ominous – and a potential crime – was what the CIA had discovered when it conducted a chemical test around the Israeli nuclear reactor at Dimona, in the Negev desert.

Duckett had concluded that Israel had something that they should not have possessed at that time: HEU, or highly enriched uranium, which could only be produced by one of the five major powers that already had nuclear weapons.

But the test had also revealed characteristics that showed the material had originated in the United States. (Mattson, p. 97) Specifically, the HEU came from Portsmouth, Ohio and then was further processed at a plant in Apollo, Pennsylvania.

The importance of this information was that the HEU was processed to such a degree – well over 90 percent U 235 – that it was classified as weapons grade uranium. The technical term for it is the acronym SNM, or Special Nuclear Material, meaning that it is fissile: it can easily be split with neutrons. Although the Portsmouth plant is shut down today, beginning in 1956 it did produce weapons-grade uranium.

It was in Apollo, Pennsylvania, that the trail of the SNM and the crime of its diversion becomes exceedingly suspect. The plant that did the further processing of HEU, and the ultimate shipping, was named Nuclear Materials and Equipment Corporation, or NUMEC, and there were a number of reasons why suspicion had centered on NUMEC even before Helms called Clark.

First, NUMEC had a rather unreliable record when it came to keeping track of HEU and other materials that had been given to it through the Atomic Energy Commission (AEC). The way the system worked is that the particular company would forward its business requests – from either private or governmental agencies – to the AEC. The AEC would then estimate how much nuclear material NUMEC would need to fulfill the contract. If a company was using up more material than the AEC properly estimated, that company would be fined quite a lot of money. If the shortages persisted, the AEC and the FBI could then open up an investigation.

With CIA's discoveries, the possibility presented itself that a diversion of the nuclear material could be taking place. Either someone from the outside was stealing the material, or someone on the inside was embezzling it.

As Mattson shows with charts, graphs and testimony, NUMEC had an extraordinarily

bad record in this regard. The company was eventually fined over \$2 million for missing materials, which, with inflation factored in, would be about \$15 million today. Mattson adduces that from 1959 to 1977, about 345 kilograms of HEU went missing from NUMEC, which translates to well over 700 pounds. (ibid, p. 286)

Explaining the Deficits

In just one year, there was a loss of over 56 kilograms (or about 123 pounds). The company made up all sorts of rationales as to why this much HEU was missing, including losses during the mechanical processing. But as the author points out, there are two problems with this accounting.

First, no other plant in America reported losses of this magnitude. The AEC concluded that the losses at Apollo were more than double what they were at any other comparably sized atomic plant in the U.S. (ibid, p. 65)

Secondly, even if one chalks up some of the missing HEU to a processing loss, that still does not account for the entire record of NUMEC. Mattson figures that, even giving the company the benefit of the doubt, it still leaves about 200 pounds of missing HEU. (ibid, p. 67) That's enough for about six atomic bombs, larger than the one used on Hiroshima.

As Mattson reports, what makes NUMEC an even more intriguing suspect is the fact that the company had some legitimate business transactions with Israel, concerning the irradiation of plants. And these legitimate packages were sent at about the time the HEU went missing. Further, the inventory records at NUMEC were extremely sloppy and some appear to have been destroyed in direct violation of the AEC code, meaning NUMEC should have been cited, but wasn't. (ibid, p. 75)

That brings us to the founders of the NUMEC plant in Apollo, Pennsylvania, a small town of approximately 1,600 people that lies about 30 miles northeast of Pittsburgh. In 1955, the Apollo Steel Plant was purchased by David Lowenthal. Two years later, Lowenthal and Zalman Shapiro cooperated in forming NUMEC.

Shapiro, a very accomplished metallurgist who lived next door to Lowenthal, had been employed for a number of years at the nearby Bettis Atomic Power Laboratory, which supported the AEC's Office of Naval Reactors.

In May 1958, Lowenthal merged Apollo Steel with the San Toy Mining Company in Maine. San Toy then changed its name to Apollo Industries, with the main operating officers of this new corporation Morton Chatkin, Ivan Novick and Lowenthal. (ibid, p. 43)

The board comprised these three men plus Shapiro, and later others. In the early 1960s, the steel plant's name was changed to Raychord Steel, but with the

decline of the steel industry, Raychord became a subsidiary company to Apollo.

Ties to Zionist Groups

Novick, one of Apollo's officers, later served as national president of the Zionist Organization of America, in which Chatkin, another officer, also held a leadership role. The ZOA was a member group of the American Zionist Council, which later became the American Israel Public Affairs Committee, which today is considered to be the leading lobbying group for Israel and one of the most powerful lobbying groups in Washington.

Novick also later served as a personal liaison between Ronald Reagan's White House and the administration of Israeli Prime Minister Menachem Begin.

Lowenthal, who was born in Poland in 1921, came to America in 1932 and served in the American armed forces in World War II, eventually becoming a citizen in 1945. After the war, he worked with the Haganah, the Jewish paramilitary force inside Palestine, on the Zionist mission to ferry Jews into Palestine in 1947 on board the boat SS Exodus.

Since almost none of the passengers had legal immigration certificates to enter Palestine, the British Royal Navy, which ran the Palestinian Mandate, seized the ship and deported its passengers back to Europe. Lowenthal's mission was a practical failure, but a tremendous propaganda success for the Zionist cause. The event was novelized by author Leon Uris in the number-one best-selling book *Exodus*, which was published in 1958 and was made into a movie two years later by director Otto Preminger, starring Paul Newman.

Lowenthal later served on board the ship Pan York, which also attempted to evade the British quarantine but was captured in Cyprus with the crew arrested, including Lowenthal. He escaped and fled to Palestine where he served with the Haganah during the war that broke out there in 1948 after the British abandoned the mandate early. (ibid, p. 44)

Lowenthal ended up serving under the legendary Meir Amit, the leading intelligence officer in Israel during the 1960s. Lowenthal was also personally acquainted with future prime ministers David Ben Gurion and Golda Meir.

Nuclear Experience

Shapiro, who had advanced degrees in chemistry and metallurgy from Johns Hopkins, worked for Westinghouse and the Navy on the nuclear reactor that powered America's first atomic submarine, the Nautilus. Shapiro also helped develop the fuel for the first commercial nuclear reactor, the Shippingport Atomic Power Station in Pennsylvania.

Like Lowenthal, Novick and Chatkin, Shapiro also was active in supporting Israeli causes, although his activities had a slightly educational tone. He was a member of the Technion Society, which supported advances in Israeli science and technology. Indeed, he became an Honorary Life Member of the group.

He also was a Director of Hillel, an international organization that tries to acquaint Jewish students with each other on campuses and organize student trips to Israel. Like Novick and Chatkin, he was a member of the Zionist Organization of America. Many years later, it was discovered that Shapiro was on the Board of Governors of the Israeli Intelligence Center, which honors spies for Israel who clandestinely advanced the interests of the state. (Mattson, p. 84)

Beyond the individual backgrounds of these four men, there was also something else which should have attracted the U.S. intelligence community's attention prior to Helms's meeting with President Johnson. While running NUMEC, both men – Shapiro and Lowenthal – were taking trips to Israel and had contacts with high officials of Israeli intelligence as well as Israel's version of the AEC.

Further, NUMEC had a guest worker, an Israeli metallurgist, in its plant, as part of an agreement NUMEC had with Israel to serve as a training consultancy which resulted in the formation of a joint company with Israel called ISORAD that initially was to deal with irradiation of citrus fruits through gamma rays. But the FBI later discovered that NUMEC also had contracts with Israel for the development of plutonium oxide as fuel elements in nuclear reactors. (Mattson, pgs. 80-81)

Since Lowenthal had so many acquaintances in high positions, he often visited Israel, including a most curious instance at about the time he purchased Apollo Steel in 1956. It was at this time that Israel was making decisions about foreign sourcing for nuclear materials and technology.

A year later, NUMEC was formed and Shapiro immediately applied for a license from the AEC to process uranium fuel in a building formerly occupied by Apollo Steel. John Hadden, CIA station chief in Tel Aviv, later noted the unusual coincidence of these events on two continents. (ibid, p. 45)

Israeli Visits

But declassified FBI files reveal that the visitations were not just one way, i.e. from Apollo, Pennsylvania, to Israel. There were also visits and meetings of Israeli officials who went to Apollo.

At the time of those meetings, there were four main branches of Israeli intelligence. The Shin Bet corresponded with the Federal Bureau of Investigation; the Mossad with the Central Intelligence Agency; the Aman roughly

with the Defense Intelligence Agency; and the LAKAM, which was responsible for security at Dimona and for procuring scientific and technological data from Western sources. (Mattson, p. 108)

In the mid-1960s, France started scaling back its support for the Dimona reactor, which was supposedly a research facility. With France's pullback, LAKAM began seeking out and purchasing parts and supplies from other sources to complete the project.

LAKAM's job included concealing the reactor's true function – the development of a nuclear bomb – from American inspections. (ibid) During an American inspection in 1964, LAKAM even created a "Potemkin village" control room to deceive the visitors.

Unlike American intelligence, Israel also had a special operations unit that served all branches. Established in 1957, it was run by Rafi Eitan and his deputy, Avraham Bendor. (In the 1980s, Eitan became notorious for the Jonathan Pollard spy case, in which Pollard, a navy intelligence employee, was paid tens of thousands of dollars to spy for Israel in the United States with Eitan his ultimate control agent.)

In September 1968, the AEC told the FBI that they were giving permission to NUMEC for a visit by four Israelis, including Eitan and Bendor. However, in the application to the AEC, the occupations of the two were disguised. Eitan was said to be a chemist in the Defense Ministry; Bendor supposedly worked for the electronics division. (ibid, p. 110)

The other two men were Avraham Hermoni, who was billed as a Scientific Counselor in the Israeli Embassy in Washington, and Dr. Ephraim Biegun, described as working in the Division of Electronics for Defense. Again, this was misleading. Hermoni did, at times, work out of Washington's Israeli Embassy, but his prime and most important function was overseeing and planning Israel's nuclear weapons program, which he did from 1959-69. Biegun was actually head of the technical division of the Mossad from 1960-70.

CIA Suspicions

After the visit, NUMEC reported that the four men were in Apollo to buy thermo-electrical generator systems. (ibid, p. 119) Why Eitan and Bendor had to be there for that purpose is not readily apparent.

CIA officer John Hadden thought the real reason for the visit was that Shapiro was divulging top-secret technical information about plutonium manufacture – and that he was aided in this by the visiting Israeli scientist working at NUMEC. The FBI later came to agree that this was most likely the true reason for the

visit. (ibid, p. 120)

Hermoni revisited Shapiro in November 1968, but the capstone to the visits to Apollo came later that month. As noted previously, France had cut back on its support for Dimona in the mid-1960s, halting the supply of uranium fuel in 1967.

In late November 1968, the Mossad arranged a covert operation called Operation Plumbat, which employed a front company in West Germany to purchase 200 tons of uranium yellowcake from Belgium. The transaction was approved by Euratom, the European organization controlling such transactions, but once the transport ship set sail for the port of Genoa, Italy, it was intercepted by another ship used by the Mossad. When the original ship reached port, the hull was empty.

The timing of this operation, on the heels of the mysterious visits by Israeli intelligence agents to Apollo, seems to constitute powerful circumstantial evidence of Israeli intentions.

Then, right after the completion of the Plumbat mission, who arrived in Israel? None other than Zalman Shapiro. The FBI discovered that in November 1968, in addition to the personal visits, Shapiro was in frequent phone contact with a number of Israeli intelligence agents, including Hermoni. (Mattson, p. 126)

A Longstanding Goal

Israel's long trail of subterfuge and duplicity was part of a longstanding goal. As early as 1948, David Ben-Gurion, Israel's first prime minister, stated that what Einstein, Teller and Oppenheimer did for America, they could easily do for Israel, since they were all Jews. In fact, he offered Einstein Israeli citizenship, which the great man declined. (ibid, p. 22) Ben-Gurion then had two meetings with Oppenheimer and numerous ones with Teller.

Ultimately, Israel settled on David Bergmann, a brilliant chemist whom Ben-Gurion appointed first chief of the Israel Atomic Energy Commission in 1952. By 1955, Bergmann was essentially running the day-to-day operations of Israel's atomic program.

In a conversation with the American ambassador, Bergmann said the Israeli science education program was adequate in physics and chemistry but weak in engineering and non-existent in metallurgy. He also revealed that the design he had laid out for a reactor was the same as the one at Shippingport, Pennsylvania, an intriguing clue because Shapiro was a metallurgist and had worked on the Shippingport power station.

Indeed, Shapiro eventually met Bergmann and the two became close friends and colleagues, serving on the board of ISORAD, which was a joint venture of NUMEC

and the IAEC. Bergmann made his first visit to America for IAEC in 1956, the year before Lowenthal turned Apollo Steel into NUMEC.

There were two significant investigations of Shapiro and NUMEC. The first was instigated by Dick Helms's call to Ramsey Clark in 1968 and the discovery of the highly enriched uranium at Dimona. (Mattson, p. 99) The second began in 1976 when Jim Conran, a whistleblower at the Nuclear Regulatory Commission, voiced complaints about the background and actions of Shapiro. Conran was a security officer and his warnings eventually got the attention of the White House. (ibid, p. 161)

During the first investigation, the FBI could not find enough evidence to justify a violation by Shapiro of the Foreign Agents Registration Act, which mandates that any person in the U.S. who is representing a foreign country's interests has to register with the Justice Department. But the FBI did recommend cancelling Shapiro's security clearances, based on wiretaps that revealed Shapiro in close contact with Israeli intelligence officials and with members of the IAEC. (ibid, p. 138)

During these calls Shapiro reportedly said he would help Israel in any way that he could. He also expressed frustration with the new ownership at NUMEC, which had been purchased by ARCO. But his Israeli contacts said he was too valuable to leave and encouraged him to stay there. (ibid, p. 139)

FBI Surveillance

One of the most curious episodes that the FBI surveillance revealed was a meeting between Shapiro and a man named Jeruham Kafkafi, a suspected Mossad officer working under diplomatic cover. He had left Washington by air on the morning of June 20, 1969, and met Shapiro at the Pittsburgh airport for about an hour. He then left and flew back to Washington.

As a result of that surveillance, Shapiro was interviewed by the AEC in August 1969, with some of Shapiro's answers to questions rather dubious. For instance, he said he did not know Hermoni was in charge of the Israeli nuclear development program and thought he was a university professor. Shapiro said his discussions in September and October 1968 with the Israeli officers were about water contamination, saboteur detection and military activities.

When asked why the Israelis could not have talked to the Defense Department about those topics, Shapiro had no answer. The interviewer wrote in his summary that Shapiro was cool and calm throughout except when the Kafkafi meeting was brought up. At first, Shapiro said he could not recall it, even though it happened just two months earlier. He then said he did remember it, claiming it

was about an overdue invoice and a power supply resource. (p. 142)

The AEC investigators did not find the last reply credible, since it did not seem to justify an airline flight from Washington to Pittsburgh and back. Shapiro adjusted his answer by saying that there was some discussion of an investigator whom he knew from America who was going to visit Israel. He also added the figure of \$32,000 as to how much Israel owed NUMEC. As Mattson notes, again, this explanation does not seem to justify an air flight and an hour-long meeting with a clandestine Mossad officer.

Closing the Inquiry

The man who ultimately decided to close this initial inquiry was Glenn Seaborg, head of the AEC. Not only did he not see any civil or criminal charges as being viable, but when President Richard Nixon's Attorney General John Mitchell recommended revoking Shapiro's security clearances, Seaborg balked at that also.

Mattson clearly sees Seaborg as being a villain in the piece. Late in the book, he explicitly accuses him of running a cover-up. (see p. 297) And, there is evidence to back up this charge. It was later discovered, during the second inquiry, that Seaborg had a close personal friendship with Shapiro. (ibid p. 268)

Earle Hightower, assistant director of safeguards at AEC, explicitly stated that the whole case regarding NUMEC was rigged because it was known that Seaborg would not take action. Little more than three years after Seaborg left the AEC, it was dissolved in 1975 and was replaced by the Nuclear Regulatory Commission, in part, because critics accused the AEC of an insufficiently aggressive regulatory program.

The second, much longer, and more vigorous inquiry into NUMEC and Shapiro came about at the creation of the NRC when Jim Conran was tasked with reviewing the record of how safeguards had worked previously for the AEC so they could be strengthened in the future. In that review process, he came across the case of Shapiro and NUMEC.

When Conran asked to see more files on both, he was denied access, causing him to go up the NRC ladder to Chairman William Anders, who was briefed by, among others, Carl Duckett of the CIA. Since Anders was about to leave for a diplomatic post, he took his concerns to James Connor at President Gerald Ford's White House.

In March 1976, the CIA's Duckett addressed an informal gathering of pilots and astronauts, saying there was little doubt Israel had about 20 nuclear warheads. Although this was supposed to be off the record, the information leaked. In

April 1976, *Time* reported that this claim was accurate, except the newsmagazine put the size of the arsenal at 13 bombs and added that the warheads could be delivered by Phantom jets or Jericho missiles.

Duckett wrote a memo to CIA Director George Bush in which he said he suspected that the Israeli program was jumpstarted by a diversion of enriched uranium from the NUMEC plant. (p. 165) He attached various appendices to the memo to show the results of previous inquiries into NUMEC and explain why his belief was justified.

One of the appendices consisted of a paper by John Hadden in which he expressed the suspicion that NUMEC was actually a shell company the Israeli government had set up for the express purpose of diverting materials, technology and information that Israel needed to speed up and facilitate its longstanding quest for atomic weapons. (ibid, p. 166)

A New Investigation

Attorney General Edward Levi was then sent a summary of the FBI's previous investigation of NUMEC. Levi alerted Ford that he thought NUMEC was culpable for several crimes and, with Ford's permission, he wished to begin a criminal inquiry. Since Ford's close adviser James Connor was also disturbed by these findings, the President approved the investigation.

What followed was a tedious bureaucratic battle between the CIA and FBI. The FBI felt it did not have direct proof that a diversion had taken place, while the CIA had the proof – the chemical tests at Dimona – but was reluctant to reveal the intelligence to the FBI. Also, the CIA did not want to furnish the FBI with technical experts to help educate the investigating agents so they could effectively cross-examine important witnesses. Thus, the FBI's inquiry dragged on through three presidents: Ford, Jimmy Carter and Ronald Reagan.

But even with these obstructions, the FBI did eventually find witnesses to a diversion from the Apollo plant. It turned out that the FBI did not do enough interviews of plant employees in its initial inquiry because there were at least four of them willing to talk. Those witnesses form the climax of Mattson's book.

In 1980, one witness said that when he read newspaper accounts about the losses of enriched uranium at Apollo, he had to chuckle to himself. When asked why, he replied that in 1965 or 1966, he was walking near the loading dock at Apollo and saw people loading containers – the dimensions that were used for HEU packets – into equipment boxes. He noticed that the shipping papers for the boxes revealed that the packages were destined for Israel. This witness then suggested some other workers at the plant who had seen similar activity. (Ibid, p. 272)

Suspicion Shipment

One of these witnesses saw a flatbed truck backed up into the loading dock area with Shapiro pacing around the area while the driver was loading "stove pipes" into a cabinet on the truck. This struck the witness as odd because the plant had regularly assigned workers for loading duties during the day but this shipment was being prepared in the evening. He explained that "stove pipes" were cylindrical containers that the plant used to pack enriched uranium inside. Each stove pipe usually contained three or four packets of HEU.

When he glanced at the clipboard resting on a package, he saw the destination was Israel. The clipboard then was yanked away and an armed guard escorted him off the dock. He also said it was unusual to see Shapiro in this area of the plant, and further, that Shapiro was very seldom there at night. (ibid, p. 275)

There were two other witnesses who told the FBI about similar events. The FBI also interviewed an NRC inspector named James Devlin, who told the agents that, contrary to what Shapiro had said, the security at the Apollo plant was below par and that NUMEC did not employ a professional security force. The company had one regular armed guard and Devlin happened to know who he was, since he was also a deputy for the township. The only other guards were unarmed and non-uniformed. (ibid, pgs. 272-73)

By this time, the FBI did not want to continue the investigation, believing that nothing would come of it, although the Justice Department urged the investigators on. But the FBI was correct since, as Mattson notes more than once in his book, the last president who really wanted to stop Israel from becoming a nuclear power was John F. Kennedy. (See pgs. 38-40, p. 256)

Richard Helms's conversation with a disinterested President Johnson underscores how that attitude changed after Kennedy's death. As Mattson further notes, opposition to Israel's nuclear-weapons program was more or less negated by President Richard Nixon's meeting with Prime Minister Golda Meir in 1969 when he agreed that the U.S. would not make any public statements revealing Israel's nuclear arsenal nor demand that it sign the Non-Proliferation Treaty, as long as Israel did no testing and made no public threats.

Even that policy was probably violated in 1979 with the Vela Incident: a suspected Israeli nuclear test done in the Indian Ocean.

Author Roger Mattson was part of the inquiry about the illegal transfer of atomic secrets to Israel, working in the NRC's safeguards department when Conran first voiced his fears about a diversion at NUMEC. Thus, Mattson became part of an internal review of the Shapiro case, seeing firsthand how certain

intelligence agencies were, by accident or design, obstructing the investigation.

Mattson concludes his important book by stating that this policy of casting a deliberate blind eye towards a nuclear heist by Israel places the U.S. in a compromised position when trying to enforce a policy of non-proliferation on other nations because of the obvious double standards.

To point out one paradox, the U.S. government executed Julius and Ethel Rosenberg for purportedly supplying nuclear secrets to the Soviet Union with less evidence. Plus, the tinder box of the Middle East is probably the last place where America should have allowed atomic weapons to proliferate, but it did.

Because of that, the U.S. has little or no moral authority on the issue today.

James DiEugenio is a researcher and writer on the assassination of President John F. Kennedy and other mysteries of that era. His most recent book is *Reclaiming Parkland*.
