

Did Israel steal U.S. weapons-grade uranium, and did it have help from U.S. citizens?

STEALING THE ATOM BOMB: HOW DENIAL AND DECEPTION ARMED ISRAEL

Roger J. Mattson

Israel's Influence: Good or Bad for America?
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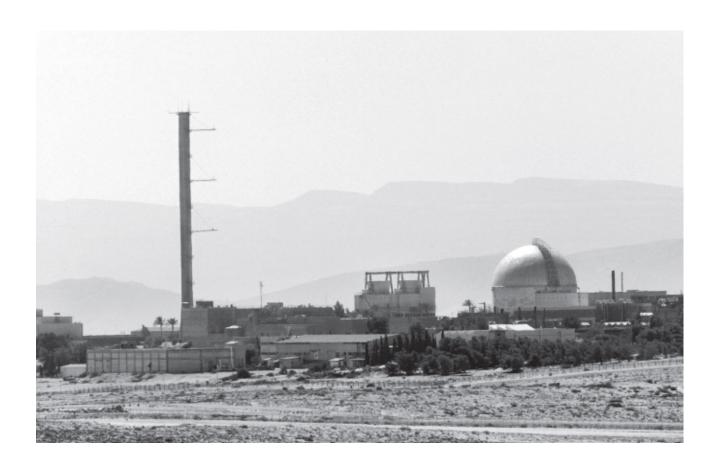
My NUMEC Research

- Started with whistleblower response in 1977
- Records from FBI, CIA, NRC, DOE, GAO via FOIA
- Interviewed people from NUMEC, NRC, Congress
- Published historical accounts & contemporary press accounts
- Records of Congressional investigation (Udall)
- Records of CIA Tel Aviv station chief (Hadden)
- Recently declassified uranium enrichment data

Israel's Nuclear Program

- Nahal Soreq research reactor US Atoms for Peace
- Dimona
 - Natural uranium, heavy water reactor (1965 startup)
 - Sole product was plutonium for bombs
 - France provided reactor & fuel reprocessing plant
- LAKAM
 - Israeli Intelligence agency
 - Headed by Binyamin Blumberg and then Rafi Eitan
 - Covert operations for nuclear program (material & info)
 - Befuddled Dimona inspectors sent by Kennedy & Johnson
- RAFAEL, Ministry of Defense, Weizmann Institute, etc.
- First weapons ready @ 1967 Six-Day War

Dimona



NUMEC Timeline

- 1956 Ernest David Bergmann asked USG for help
- 1956 David Lowenthal visited Israel
- 1957 Lowenthal and Zalman Shapiro founded NUMEC, opened uranium plant in Apollo, PA
- 1960 NUMEC began processing HEU for US Navy
- 1964 Oak Ridge learned uranium was missing
- 1965 AEC audit: 178 kgs lost; 94 kgs could not be found
- 1966 NUMEC borrowed to pay \$2.2 M for missing HEU
- 1967 ARCO bought NUMEC and repaid loans

Apollo Plant & Office





NUMEC Timeline, cont.

- 1968 Inventory difference grew to 287 kgs
- 1968 Four spies visited NUMEC (false credentials)
- 1970 Shapiro left NUMEC for Kawecki-Berylco;
- 1971 AEC denied his security clearance upgrade & found Shapiro uncleared job at Westinghouse
- 1971 B&W bought NUMEC from ARCO
- 1978 Apollo uranium operations ended
- 1992 Decommissioning of Apollo plant completed
- 2016 \$400M cleanup of waste burial pit continues

The AEC Audit of 1965

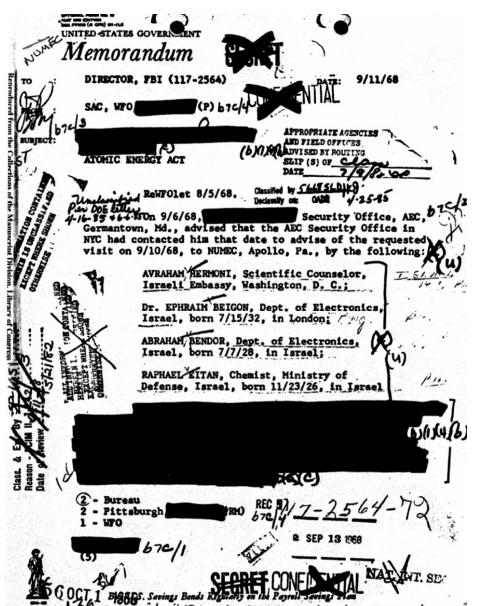
- 178 kgs of HEU was gone from Apollo plant
- 94 kgs unexplained 6 atom bombs (NRC)
- No FBI investigation AEC said none needed
- Various explanations offered, none sufficed
- AEC found no evidence of diversion but did not seriously look
- AEC chairman Seaborg: what good would it do to admit HEU had been stolen?

Zalman Shapiro's Associations

- ZOA officer and awardee; considered immigration to Israel
- NUMEC funder David Lowenthal was next-door neighbor,
 Sonneborn alum, confidant of Meir Amit & prime ministers
- Ernst David Bergmann co-director of ISORAD
- LAKAM directors (Binyamin Blumberg, Rafi Eitan)
- LAKAM agents in US (Hillel Aldag, Joseph Eyal, Avraham Hermoni, Jeruham Kafkafi)
- Mossad (Meir Amit, Rafi Eitan)
- Shin Bet (Avraham Bendor, Ephraim Biegun)
- Military Intelligence (Avraham Eylonie)
- Israeli metallurgist at NUMEC (Dr. Bernard Cinai)
- Board of Governors, Israeli Intelligence Heritage Center

1968 in Desert near Dimona

- CIA collected environmental samples to detect first plutonium production
- CIA Station Chief John Hadden sampled the flora; told others about it; took his kids along
- CIA found HEU near Dimona in 1968
- Nuclear Forensics: HEU had US origin
 - 97.7% enrichment unique to AEC's Portsmouth plant
 - 97.7% HEU only used to fuel US naval reactors
 - NUMEC processed naval reactor fuel at Apollo
- Helms reactivated FBI investigation in 1968



Avraham Hermoni Ephraim Biegun Abraham Bendor Rafael Eitan

September 1968 Israeli Spymasters Visited NUMEC

- Hermoni, Eitan, Bendor, Biegun met with Shapiro
- Said they wanted Pu-238 power source for surveillance equipment
- Other possible reasons for their visit:
 - New tactics after ARCO purchase of NUMEC
 - Maybe they took some HEU home
 - Plumbat affair 200 tons of yellowcake diverted
 - Shapiro arrived in Israel at same time as yellowcake
 - Shapiro gathering of brain trust in November

Conran the Whistleblower

- 1975 ERDA withheld NUMEC information from Conran
- 1976 Duckett briefed NRC about CIA's conclusion
- 1977 Conran wrote open letter to Carter & Udall
- Mattson headed Conran task force
- Udall and Dingell investigations
- Extensive press coverage
- Frustrated, Congressmen attacked NRC's Gossick
- FBI and CIA withheld information from NRC
- CIA withheld information from FBI
- Neither CIA nor FBI were technically competent
- 1978 Brouhaha blew over

1980 Eyewitness Account

- NUMEC employee statement to NRC (labor dispute)
- NRC alerted FBI who interviewed employee & others
- Employee knew a lot of details about the plant
- Recalled unusual nighttime shipment in 1965
- Shapiro was there that night
- Canisters were those used for HEU
- Armed man ordered employee off dock
- Shipping manifest indicated Israel
- Boss threatened employee next day
- Others confirmed details of eyewitness account
- Containers could easily house HEU; no inspection
- FBI ended its investigation

What Various People Concluded

- J. Edgar Hoover Remove Shapiro's clearances & classified contracts
- Ramsey Clark Authorized FBI wiretaps after HEU discovered
- John Mitchell Deny Shapiro's security clearance upgrade
- Edward Levi Investigate diversion & Federal agency coverup
- Griffin Bell Based on CIA documents, more investigation warranted
- Glenn Seaborg Conspired to coverup; what good to admit diversion; find Shapiro new job; Portsmouth HEU
- James Connor Something happened; nothing can be done about it
- Morris Udall If deciding under penalty of death, diversion occurred
- NRC (2009) Can't say diversion did not occur or material recovered
- Peter Stockton Shapiro did it . . . I'm damned sure it happened

What Various People Concluded, cont.

- Henry Myers Israel made nukes from HEU by 1967
- Victor Gilinsky Evidence points to Israeli operation
- Richard Helms We did the job and avoided political pitfalls
- Lyndon Johnson Don't tell anyone what Duckett thinks
- Carl Duckett Israel had HEU bomb & HEU came from Portsmouth
- John Hadden Treasonous act was committed and covered up
- Zbigniew Brzezinski (2015) Something did transpire; explosive, controversial, "give it back?"
- Jessica Mathews (2015) 1979 Israel/Egypt peace agreement would be upset by NUMEC scandal
- Avner Cohen Helms & Laird convinced of diversion; wondered if Hermoni lied in denying diversion by Shapiro
- Seymour Hersh No diversion but "sensitive mission conducted for Israel"

Conclusions

- Portsmouth HEU near Dimona proved there was diversion
- Evidence pointed only to NUMEC, not other HEU processors
- NUMEC apparently created for diversion and technology transfer
- LAKAM had motive, capability and opportunity to divert HEU
- Eitan was audacious & recently implied involvement in diversion
- Shapiro had connections with and allegiance to Israel
- FBI followup with eyewitness was deficient
- FBI &CIA technically inept & snubbed NRC assistance
- Shapiro lost clearances but was not prosecuted (in part due to nature of the FBI's evidence)
- No declassified evidence that CIA or president involved in diversion
- Justice investigated and did not prosecute AEC, FBI or CIA
- Whether diversion happened or not, it could have

Policy Implications

- AEC covered up initial investigation
- Johnson ignored advice to block Israeli bomb
- FBI did not look into diversion until too late
- FBI information withheld from NRC
- FBI & CIA feared Israel's pushback
- CIA information withheld from NRC and FBI
- Ford expressed interest and Levi investigated but trail was cold
- Nixon's deal with Meir Nuclear Opacity
- Taxpayers are footing cleanup bill \$400 M

NUMEC Not Alone

- Others in US assisted Israel's nukes
- LAKAM & Eitan managed some of them
 - Arnon Milchan
 - Richard Kelly Smyth
 - Arthur Biehl
 - Jonathan Pollard
 - Zalman Shapiro
- Others
 - Raymond Fox
 - Training at national labs

Deeper Understanding

- Dual loyalties frustrate safeguards, everywhere
- Documents undeservedly classified for 50 years frustrate American democracy
- Israel lobby impedes frank assessment of Israel
- Nuclear Opacity (Ambiguity) impedes progress toward WMD-free Middle East
- America has double standard for nuclear proliferation in Middle East