

August 6, 1979

MEMO TO: MKU

FROM: HM

This memorandum is a status report on NUMEC, Shapiro, etc.

The push and shove is that the issue stays alive because, notwithstanding 15 years of intermittent interest in resolving the matter, significant questions remain unanswered and insufficiently investigated. While it is conceivable that Shapiro has not violated the law, the bulk of information indicates that he did engage in questionable activity of some sort. The Arnold & Porter (A&P) lawyers have done little to help their client; their brief submitted last September and the December meeting with Shapiro which they presumably endorsed, both served to hurt his cause.

The remainder of this memorandum discusses the following: the June 25, 1979 meeting with A&P; the bases for suspicion; achievements of our inquiry; and recommendations as to where to go from here.

Meeting with Krash et al., June 25, in your office.

The appointment was made directly with Dee without A&P notifying Michael or me. Upon our learning of it from Dee, Michael called A&P to find out what was up. They said they were concerned about improper activity by me involving first, leaks to the press and second, failure to adhere to our agreement to provide them documents. I assume they set up the meeting this way hoping neither Michael nor I would attend: they

then would have been in a position to confront you with allegations you were unprepared to address. It seems somewhat hypocritical that they would operate in such a fashion when they themselves are such strong proponents of the right of their client to face his accusers.

In any event, the ostensible purpose was to complain about a story in the Chicago Tribune and an inference Krash et al had made concerning documents that I had shown Duckett but not them. Since the complaints turn out to be based on misunderstandings that could have been cleared up without taking the matter to you, they may well have had other reasons for the meeting, namely to persuade you to take steps that would have the effect of ending the various inquiries now underway. They raised, as they have before, the spectre of Shapiro, an innocent person, a victim of circumstances, hounded by his government at the instigation of persons having ulterior motives.

The documents purportedly shown to Duckett but not to A&P are referred to in the attached November 7, 1978 letter to you from Duckett. Because Duckett was not clear as to the nature of the materials provided him, Krash et al. could have reasonably inferred that I had shown Duckett documents prepared by us that should have been provided to Shapiro. But Duckett is in fact referring to interviews conducted by the NRC as part of its Gossick inquiry. The bulk of these interviews are unclassified and were given to Krash last

not attached ✓

summer. Beyond that, however, I did show Duckett the classified version, which he (but not Shapiro) is cleared to see; my purpose had been to seek clarification of the circumstances surrounding Duckett's February 1976 briefing to the NRC. According to the NRC Gossick inquiry there was considerable uncertainty as to who had invited Duckett and whether he had presented his own views or the official CIA position. Duckett's version is presented in his November 7 letter. The point is that some NRC Commissioners and staff, (seeking to downplay the significance of Duckett's briefing) had implied that Duckett had walked in off the street to peddle his own version of NUMEC which allegedly was not the CIA position. Duckett disputes this, saying it is clear in his mind that Commissioner Kennedy invited him to present the briefing, and that there was no question but that he was stating the CIA position. (Kennedy says he does not recall who invited Duckett or why, but he assumes it was former ^{NRC} Chairman Anders)

With regard to the concerns of Krash et al., the following seems to be the case: They misunderstood the nature of the documents referred to by Duckett; the misunderstanding could have been corrected by a simple inquiry made directly to me; and they seem to have the idea that it was improper for us to consult with Duckett. During the June 25 meeting, Krash and/or Becker suggested that Duckett was a disreputable person, who had been

(as Deputy Director for Science & Technology)

fired from his CIA position/for indiscretion, and who should not be believed. The fact is that, whatever the circumstances of Duckett's departure from the CIA, he continued to have some sort of relationship with the agency and was sufficiently well thought of to become involved in highly classified consulting work. It is necessary to go through some exceedingly convoluted reasoning to get to the point where you believe Duckett is lying and has ulterior and malevolent motives. That Krash et al. would have us believe that Shapiro is telling the truth and that Duckett is lying, in itself, says something.

With regard to the Chicago Tribune story (see attachment) Krash et al. contended that I had "leaked" a story implying that an NRC analysis was finding that NUMEC had been designed to facilitate a diversion. Jim Coates, the reporter, has since stated (see attached letter) that he did not intend any such implication. The story itself results from my having briefed Coates on our June 11 hearing on nuclear security.

It is interesting that A&P did not pick up the statement in the Coates story that:

"Sources* on Capitol Hill and in the Central Intelligence Agency told the Tribune that CIA analysts have concluded that Israel diverted 93 kilograms of bomb grade uranium from the plant shortly before the six-day Arab-Israeli war of 1967."

* To the extent I am the source of any such statement, it is by pointing to a reference to a statement made by a former NRC General Counsel to the Gossick investigators.

*by this approach
by A & P suggests
their involvement
Heish for
Duckett
interview*

That they picked up on the statement about the NUMEC design while failing to complain about CIA conclusions about a diversion is indicative of extreme sensitivity to any suggestion that NUMEC's purpose from the beginning had been to provide Israel high enriched uranium.

Additional comments concerning the meeting with A&P:

A. It seemed to me that the A&P lawyers were much weaker in their protestations of Shapiro's innocence than they had been previously. One reason for this might be that in our first dealings with them they were new to the case, and since then they may have discovered facts that have generated doubts in their own minds. (It would be interesting to know the reasons underlying Shapiro's changing from Edward Benet Williams. The case had been handled by Williams since 1970 or before, and the costs incurred in getting A&P up to speed must have been considerable.)

B. I found it obnoxious that they suggest I am engaged in a vendatta against Shapiro. That they make such assertions is further indication of their being inept and suggests they are trying to frighten us away with charges of unfair practices rather than by logic of their case.

Bases for Suspicion That a Diversion Occurred

The following are the set of circumstances that create the feeling that something was afoot at NUMEC other than the inevitable

losses expected in a complex chemical process:

1. Israel possessed nuclear weapons, probably fabricated from uranium. While the source of such uranium is uncertain, NUMEC would be high on the list of potential candidates.

2. Safeguards at NUMEC were insufficient to protect against relatively sophisticated diversion schemes. The NRC study now nearing completion documents this oft-expressed contention for the first time. ✓

3. The NUMEC losses are difficult to explain; of 178 kilograms lost by NUMEC prior to mid-1965, the AEC concluded that some 93 kilograms could not be accounted for by known loss mechanisms. The 93 kilograms disappeared either via unknown mechanisms or it was diverted. (Since a major and unsuccessful effort was made in the mid-1960s to explain how the 93 kilograms might have been lost in the

course of processing, it is unlikely that a convincing explanation will emerge at this date. On the other hand, in the absence of hard evidence of a diversion (i.e. a believable statement by a person who knows), it is unlikely that more than a circumstantial case will be made in support of the diversion theory.) ✓

4. NUMEC and Shapiro had substantial connections with the Government of Israel. A principal investor in NUMEC was David Lowenthal, who allegedly fought alongside the Israelis in the 1948 war. Lowenthal was president of

Apollo steel and NUMEC's Apollo operations were conducted in a facility provided by and adjacent to Apollo steel. NUMEC's offices were located in the same building as those of Apollo steel. At least one Israeli worked in NUMEC's plutonium facility, located about 5 miles away from the Apollo plant, and a number of Israelis visited NUMEC, some of whom were intelligence operatives. There appears to have been a classified teletype link between Apollo and Israelis in New York, although the location of the Apollo terminal, who used it, and what its purpose might be are all unclear.

5. The FBI conducted an extensive investigation of Shapiro in 1968-69, apparently involving wire taps and other surveillance.

6. Former CIA director Helms believes Shapiro was an agent of the Government of Israel and he recommended that the FBI conduct the above noted surveillance.

7. In 1970-71 the Nixon administration, with the knowledge of Mitchell, Ehrlichman, Kissinger, Secretary of State Rogers, and probably Nixon, decided to deny Shapiro access to nuclear weapons information without granting him a hearing. This would have been the first denial of such a hearing in the 25 year history of the AEC. The AEC, in fact, argued against denying any hearing request. But Justice was prepared to hold firm, although the matter became moot when Shapiro, with the

advice and possible assistance of former AEC Commissioner Ramey, went to Westinghouse where a ^{nuclear}/weapons clearance was not required.

8. In meeting with us last December, ⁽¹⁹⁷⁸⁾ Shapiro made implausible, incorrect, or unconvincing statements with regard to the following:

A. NUMEC's financing: Notwithstanding the elapse of two decades, Shapiro seemed unnecessarily vague about NUMEC's financing. He was uncertain about such matters as the amount of stock he received, the number of investors and the size of their investment. He was hesitant and vague in responding to questions about David Lowenthal, the President of Apollo Steel and the principal fund raiser for NUMEC. (Lowenthal, as noted, was a big promoter of Israel, and purportedly had fought alongside the Israelis in 1948.) Uncertainty with regard to these matters was inconsistent with Shapiro's strong and unqualified denial when asked whether there might be Israeli money underlying the NUMEC operation. Also, does it not seem that the amount of cash behind NUMEC, \$250,000, was low even for 1958?

B. NUMEC's initial contracts:
Again notwithstanding the passage of time, Shapiro seemed unduly vague as to the source of NUMEC's initial contracts and the extent to which they were concerned with government projects.

C. Adequacy of records: Shapiro states ^{Tr,} (p. 70) that records, "... were adequate to have ... determined whether there was any major amount of material that might have suddenly disappeared." This statement is in conflict with several statements in AEC documents to the effect that, "in an attempt to establish yields and loss mechanisms directly applicable to this (WANL) purchase order, the survey team requested NUMEC production control and process engineering data on this and other contracts. The data made available was of little or no value in this regard. Process lots or batches could not be correlated to points in time nor could sequence of processing events be established. All efforts in this regard direction were negated when it was learned that many of the requested records had been inadvertently destroyed by supervisory personnel during a "clean-up" campaign at the time of an employee strike, January 1 to February 25, 1964."* (See also next point with regard to usefulness of lost records.)

D. Statements concerning significance of lost records: Shapiro states that NUMEC records that were lost or destroyed had "nothing to do with SNM control per se." Charles Keller, the AEC official responsible for NUMEC inventories stated in a letter to me

* From report of AEC material survey, November 1-12, 1965 P.16 Pg.13

dated January 12, 1979 that, "We thought in 1964 and I personally believe today that the 'missing' records would have been useful in establishing what happened to some of the materials."

E. Overall adequacy of NUMEC's safeguards: Shapiro leaves ^{the} impression that safeguards were pretty good; i.e. that diversion by insiders or outsiders would have been difficult. Shapiro's statements in this regard are in conflict with the statements in AEC documents that safeguards were probably not adequate to protect against sophisticated diversion conspiracies; e.g. "However, these (criminal penalties) may not be a sufficient deterrent for deliberate diversion, especially concerning foreign shipments. The question of balance arises because even the strictest of measures would be illusory from the standpoint of proliferation. Material control would not be enough."

(H. Brown for files, circa Feb. 1966.)

In addition, the ongoing NRC analysis of NUMEC security has tentatively found (Dircks to MKU, ^{E+E Hearing,} June 11, 1979) that "... because of the really (sic) lack of adequate safeguards program at NUMEC during the '60s, ... a knowledgeable insider could quite easily have made off with material in that plant."

F. Adequacy of safeguards against intrusion from outside: Shapiro answered, "Yes," ^(Tr. p. 67) in response to the question of whether NUMEC security was adequate to protect against the clandestine entrance of two or three people who might have known the layout, and that any such entry would have probably been detected. The forthcoming NRC report disputes this; it purportedly finds that one guard patrolled the premises on a regular schedule, and ^{notes} several points at which clandestine entrance could have been gained to the plant, including a path through a ventilation duct into the vault. Shapiro's contention ^{is} that round the clock operation would have made external entry difficult (Tr. p. 67) and that the only way into the vault *would have been to overwhelm the custodian.*

G. Relevance to a nuclear weapons program of experience gained by an Israeli scientist at NUMEC: Shapiro was asked (Tr. p. 26) whether experience gained by foreign scientists at NUMEC could have been applied in nuclear weapons programs. He answered: "Not that I can see at all." Since any experience gained in working with plutonium (specifically that gained by Bernard Cinai) would have some relevance to a nuclear weapons program, Shapiro's denial of this was unnecessarily and unjustifiably unequivocal.

H. Amount of material not recovered from burial pit: Shapiro states (Tr. p. 49) that he believed there was considerably more material in the burial pit than was implied by data collected as the result of the excavation in late 1965. As far as I can tell from the record, Shapiro/NUMEC had, prior to last December, never claimed that a significant portion of the missing material remained in the burial pit.

I. Relationship with officials of Israeli intelligence: Shapiro was asked (Tr. p. 88) whether he had any "... relationships or contacts with people who might have been known to him to be an Israeli intelligence operator or in Israeli intelligence operations in this country. Shapiro stated "No," that his only contact was in Israel with the head of military intelligence. A more appropriate answer would have been, to the best of his knowledge he had no such contact in this country, but that since everyone knows that intelligence types do have apparently benign covers, that some of the Israelis he did deal with might very well have been associated with Israel's intelligence services. Again, his denial was unnecessarily unequivocal, and probably a lie since we know that Israeli intelligence officials visited NUMEC.

J. Airport meeting in Pittsburgh? Shapiro states, apparently for the first time and apparently contrary to fact, the Kafkafi went on to Dayton to visit his daughter

*apparently
Henry
did
know
about
Bender
Eitan at
this time*

following the meeting. AEC documents say Kafkafi returned to Washington. Moreover, while Shapiro recalled that Kafkafi was on his way to meet his daughter in Dayton, he could not recall details surrounding the delinquent payment that was the purported reason for the meeting, e.g. ^{details concerning} the nature of the product for which payment was owed, and the amount owed. Shapiro was asked (Tr. p. 93) whether anything changed hands at the meeting, whether parcel, package, object, paper, or anything. Contrary to other information we have, he answered, "No", and when asked whether he was certain said, "Positive." Later in a followup letter, he said through the A&P lawyers that "... he ^(Shapiro) continues to be unable to recall the exchange of any item at this meeting, but conceivably he may have given Mr. Kafkafi a copy of the NUMEC invoice that was subject of discussion at the meeting."

K. Denial of knowledge of a secure communications system: Shapiro denied any such knowledge at the December meeting with us but the January followup letter contains a cryptic statement that Shapiro now recalls that once while visiting the Israel Investment Authority in New York, he may have used a telephone to discuss some business venture with the Israeli scientific counselor in Washington, and that he had no knowledge whether the telephone contained an encoding device.

L. Knowledge of Israeli nuclear weapons program and persons associated therewith: In his prepared statement (Tr. p. 4), Shapiro says that, "Apart from what I have read in the press, I have no knowledge whether Israel does or does not have a 'nuclear weapons program.'" This statement is implausible. Israel's nuclear weapons program is widely discussed within Israel and anyone having as much interest in Israel's security as did Shapiro would certainly have asked questions if only to satisfy his own curiosity. And furthermore, the group with whom Shapiro had close contacts would have been knowledgeable in this area, encompassed^{ing} as it did, persons in Israel's scientific, military and nuclear weapons establishments.

↓ especially
Bergmann
who he
praised highly

M. Failure to press for security clearance: The AEC, having been pushed by Justice, and with White House concurrence, had decided to deny Shapiro a security clearance in last 1970. Furthermore, Justice had, in the face of AEC opposition, successfully advocated that Shapiro should not be granted a hearing should he request one. Shapiro needed a nuclear weapons clearance to continue in his job at Kawecki Berylco. When Shapiro was asked about this last December he stated he had not pressed the matter because the president of Westinghouse Power Systems had offered him a position which he had not previously sought. Since this position did not require the type of clearance necessary for the job at Kawecki, the clearance question, according to Shapiro, became moot. Shapiro denied being fearful of what might emerge from further investigation, saying that the Westinghouse position was more lucrative. This rationale for not pursuing the question is fishy because denial of a clearance was a serious matter which would follow him around for the rest of his career. If this were to happen to me, and I had nothing to hide, I would have expended whatever resources I had to rectify the matter.

(Pg. 92)

Significant Events Since Beginning of our Inquiry

Since the summer of 1977, the following has happened:

1. Agency statements on the diversion questions have evolved substantially from messages conveying minimal or misleading information; e.g. on August 4, 1977 ERDA stated that,

"No evidence was found that significant amounts of strategic special nuclear materials had been diverted."

In comparison, NRC said in a December 8, 1978 letter to you that,

"Obviously there are many people familiar with the information that exists on this subject who seriously suggest a diversion occurred, and they have arguments that do have substance. We have seen no hard proof, one way or the other, but there are various circumstantial items that keep the question unanswered."

2. Misleading statements on the diversion question by Gossick, Acting ERDA Administrator Robert Fri, and ERDA safeguard officials Alfred Starbird, Edward Giller and Harvey Lyon have been subject of extensive investigations. Having concluded that Fri may have violated federal law, the DOE Inspector General (IG) sent his findings to the Department of Justice. Justice declined to pursue the matter, concluding that the DOE IG's report, "contains insufficient evidence to support the conclusion that Mr. Fri made false statements."* The NRC admits that Gossick made ambiguous and incorrect

* The DOE IG believes this means either that Justice concluded either (1) there was insufficient evidence to support a prosecution and/or (2) there was sufficient evidence but that a prosecution would be unsuccessful.

statements (although they deny intent), and the DOE to date has made no findings with regard to statements by Generals (retired) Starbird and Giller, and Admiral Lyon (retired) all of whom are no longer with DOE. Lyon was fired, probably in part for having dissembled with regard to the diversion issue.

3. For the first time, a thorough look is being made of the security conditions at NUMEC. The inquiry, undertaken by NRC at your request has tentatively concluded that a diversion could have occurred with ^{there being a} low likelihood of apprehending those who carried it out. (This undercuts the argument of Shapiro that NUMEC security was ~~so~~ such that it would be difficult to divert materials and anyone who tried would run a high risk of being caught.)

4. The Department of Justice (apart from the FBI and apparently for the first time) has undertaken a comprehensive review of CIA documents. Three lawyers from the Criminal Division spent several months examining documents, and a report on their findings is now being prepared. 'It beats me as to how this examination could require so much time.

5. The FBI had been directed to assign a high priority to interviews of people associated with NUMEC and/or Shapiro. Whether this is for real or for the sake of appearance is not clear. The A&P lawyers seemed to know about this, however, and it may have been the real inspiration for the June 25 meeting.

6. The rug has been pulled from under the major arguments made by the A&P lawyers in their memorandum prepared in response to your letter of June 12, 1978; i.e., that the record establishes a satisfactory explanation of the material losses; that prior investigations have concluded that there is no factual basis to support a charge of diversion; that the record does not show pertinent deficiencies in NUMEC's recordkeeping and safeguards procedures; and that the sole (and illegitimate) basis for suspicion in the matter owes to Shapiro's proper and aboveboard relations with the government citizens of Israel.

Recommendations:

Underlying the following recommendations are three assumptions:

1. It is important that there be prepared a comprehensive report, whether it be by Justice, a special group convened by the President, or whatever, even if the full report is not made public, and even in the absence of sufficient evidence to support a prosecution.

2. The fact of your active interest probably has been (and would continue to be) a significant fact in stimulating investigative activity by the Department of Justice, in encouraging the CIA to cooperate with Justice, and in bringing about a more candid position on the subject at the DOE and NRC.

3. The amount we can do is limited by available staff resources; our most productive role can be to provide low key encouragement to the investigative efforts of others.

With the foregoing in mind, I recommend that a letter be sent to the Attorney General stating, among other things, the following: that there is much about the matter that is unsettling including past failures of Justice to conduct a thorough inquiry; that you think it important that the matter be pursued until it is determined whether there is sufficient evidence to support prosecutions; that, even in the absence of prosecutions, a comprehensive report should be prepared, although it is recognized that there might be aspects of the matter that should be omitted from any unclassified version of such a report; and that you will maintain your interest and will make minimal comments as long as you are convinced that a good faith effort is being made to get to the bottom of the matter, one manifestation of a good faith effort being establishment by the A/G of a special investigative group, headed (as you once suggested) by a retired judge. The prospective letter would include as an attachment, materials we have assembled in the course of our inquiry, including a compendium of suspicious circumstances such as that contained in this memorandum.