FEDERAL BUREAU OF INVESTIGATION


REPORT MADE BY

CHARACTER OF CASE

ZALMAN MORDECAI SHAPIRO

ATOMIC ENERGY ACT; OOJ

REFERENCE

Bureau teletype to Pittsburgh, 3/7/80; Philadelphia teletype to Bureau, 3/11/80

REFERENCE CONTAINED

DATE 5/18-80

CONV. PRETRIAL DIVERSION PEND. FINES SAVINGS RECOVERIES CASE HAS BEEN:

- PENDING OVER ONE YEAR
- PENDING PROSECUTION OVER SIX MONTHS

- RUC-

ACCOMPLISHMENTS CLAIMED

NONE

ACCUTALS

CASE HAS BEEN:

PENDING OVER ONE YEAR

PENDING PROSECUTION OVER SIX MONTHS

APPROVED

SPECIAL AGENT IN CHARGE

DO NOT WRITE IN SPACES BELOW

COPY MADE:

2 - Bureau (117-2564)
2 - Pittsburgh (97-123)
2 - WPO (117-273)
1 - Philadelphia (117-174)

Dissemination Record of Attached Report

Agency

Request Recd.

Date Fwd.

How Fwd.

By

Notations

97 APR 16 1980
UNITED STATES DEPARTMENT OF JUSTICE
FEDERAL BUREAU OF INVESTIGATION

Copy to:

Report of:

Date:

Field Office File #:

Title:

Character:

MARCH 28, 1980

Office:

PHILADELPHIA,

PENNSYLVANIA

Field Office File #: 117-174

Bureau File #: 117-2564

ZALMAN MORDECAI SHAPIRO

ATOMIC ENERGY ACT
OBSTRUCTION OF JUSTICE

Synopsis:

Interviews of James Allen, Deputy Director, Nuclear Regulatory Commission (NRC), Region I, King of Prussia, Pa., Walter Martin, Chief, Safeguards Branch, NRC, Region I and James Devlin, Chief of Security and Investigations, NRC, Region I set forth. _____ Fuel Facilities Inspector, NRC Region I interviewed re his interview of _______ of Apollo, Pa. concerning health hazards of the Babcock and Wilcox Nuclear Materials Facility in Apollo, Pa., as well as _______ allegations concerning diversion of special nuclear material from the Numec Plant in Apollo, Pa. Details contained herein.

DETAILS:

At King of Prussia, Pa.

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James Allan, Deputy Director, Nuclear Regulatory Commission (NRC), Region 1, King of Prussia, Pa., was interviewed at his place of employment. He was advised of the identity of the interviewing agent and that the purpose of the interview was to discuss any knowledge he might have regarding allegations received at his office from an individual identified as of Apollo, Pa. Also present during the interview was Investigator, Office of Inspector and Auditor, NRC. Allan furnished the following information:

Allan stated that he is currently the Acting Director of the Nuclear Regulatory Commission, Region 1 Facility, in the absence of Director Boyce Greer. Allan stated that his office received a complaint from on February 27, 1980, alleging health problems in the area of the Babcock and Wilcox Plant in Apollo, Pa. Allan stated that the Babcock and Wilcox Plant was formerly owned by the Atlantic Richfield Company, and prior to ARCO's ownership, it was owned by Zalman Shapiro. Under Shapiro's ownership the facility was known as the Nuclear Materials and Equipment Corporation (NUMEC), Apollo, Pa.

Based on allegations, Allan indicated that of the Fuel Facilities Materials Safety Branch was dispatched to interview and determine the extent of the allegations. Allan explained that allegations concerning health problems is the responsibility of the Fuel Facilities and Materials Safety Branch. Hilbert Crocker is the Chief of the Fuel Facilities Section. Allan indicated that accountability for special nuclear material is the responsibility of the Safeguards Branch. Walter Martin is Chief of the Safeguard Branch and James Devlin is Chief of the Security and Investigations Section of the Safeguard Branch.
Allan stated that he has no direct knowledge regarding the allegations made by [redacted] of Apollo, Pa. He did believe that the original complaint concerned [redacted] belief that the Babcock and Wilcox Plant was causing health problems, particularly cancer, in the Apollo, Pa., area. Allan stated that the NRC has not yet pursued these allegations as it relates to health problems since it will require some epidemiological studies and, therefore, some of this responsibility would be referred to the state of Pennsylvania.

Allan was unable to provide any additional pertinent information.
Walter Martin, Chief, Safeguards Branch, Nuclear Regulatory Commission (NRC), Region 1, King of Prussia, Pa., was interviewed at his place of employment. He was advised of the identity of the interviewing agent and that the purpose of the interview was to discuss any knowledge he might have regarding an allegation made to an NRC employee, on March 5, 1980, by Apollo, Pa., concerning the Babcock and Wilcox Nuclear Materials Facility in Apollo, Pa. Also present during the interview was Office of Inspector and Auditor, NRC. Martin furnished the following information:

Martin advised that he was aware of the interview that had with of Apollo, Pa., on March 5, 1980. He stated that his office, that is the Safeguards Branch, was concerned only with the allegation made by regarding that the diversion of nuclear material from the Nuclear Materials and Equipment Corporation of Apollo, Pa., (the former owner of the Babcock and Wilcox Facility in Apollo, Pa.). The allegations regarding health and safety hazards to the Apollo, Pa., area were of concern to the Fuel Facilities and Materials Safety Branch of which is a part.

Martin stated that he was unable to provide any additional information regarding the allegations made by since he did not participate in the interview. He did indicate, however, that his office is interested in the allegation since his office is responsible for accountability for special nuclear material.
James Devlin, Chief, Security and Investigations Section, Safeguards Branch, Nuclear Regulatory Commission (NRC), Region 1, King of Prussia, Pa., was contacted at his place of employment. He was advised of the identity of the interviewing agent and that the purpose of the interview was to determine any knowledge he might have regarding allegations of diversions of nuclear material from the Nuclear Material and Equipment Corporation, Apollo, Pa. Also present during the interview was Investigator, Office of Inspector and Auditor, Nuclear Regulatory Commission. Devlin furnished the following information:

He indicated that he was aware of an allegation of health hazards made by [redacted] of Apollo, Pa., to NRC employee [redacted] on March 5, 1980. Devlin said that he or his office did not conduct any investigation in this regard regarding these allegations. He did indicate, however, that in 1965 - 1966 the Atomic Energy Commission (the NRC's predecessor) did not impose any safeguard requirements on organizations like NUMEC, and NUMEC did not have a security force per se. According to Devlin, NUMEC's only armed guard was an individual by the name of [redacted] who was also a Deputy Policeman for the local town which he believed to be Leechburg Township, Pa. According to Devlin, the only other security coverage at the NUMEC facility were unarmed, ununiformed watchmen who patrolled after hours.

Devlin was unable to provide any additional information regarding security at the NUMEC facility during the 1965 - 1966 period.

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Fuel Facilities Inspector, Fuel Facilities Projects Section, Fuel Facility and Materials Safety Branch, Office of Inspection and Enforcement, Nuclear Regulatory Commission (NRC), Region 1, King of Prussia, Pa., was interviewed at his place of employment. He was advised of the identity of the interviewing agent and that the purpose of the interview was to discuss an interview he had on March 5, 1980, with [ ] of Apollo, Pa. Also present during the interview was investigator [ ] of the Office of Inspector and Auditor, NRC. [ ] furnished the following information:

[ ] stated that at approximately 3:25 p.m. on February 27, 1980, Region 1, NRC, King of Prussia, Pa., Public Affairs Officer [ ] received a phone call from [ ] of Apollo, Pa. Alleged that there were several hazards at the Babcock and Wilcox Nuclear Materials Facility at Apollo, Pa. As a result of this contact with the NRC, [ ] was assigned to locate and interview at his residence, Apollo, Pa., telephone number [ ].

[ ] stated that he interviewed [ ] at the above address on March 5, 1980, at which time [ ] alleged that various health problems of residence in the Apollo, Pa., area may be attributable to the Babcock and Wilcox Nuclear Materials Facility located in Apollo, Pa. [ ] stated that [ ] indicated that he was a case in point. [ ] alleged that in the Fall of 1977 he began to experience various symptoms including dizziness, nausea, depression, and light-headedness. This condition continued for several months. In June of 1978 a Babcock and Wilcox physician identified by [ ] as [ ] examined [ ] Results of the

Investigation on 3/11/80 at King of Prussia, Pa. File # 117-174 (SQ12)

by SA Date dictated 3/17/80

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On October 12, 1979, [Person A] told [Person B] that he had returned to the Miners Clinic and saw [Person C] who told him that he was fit to return to work. He did so for approximately one week and then entered Citizens General Hospital in New Kensington, Pa., complaining of sore throat and oxygen deficiency. At the time [Person A] was experiencing these symptoms he was residing at [Address], which according to [Person D] is very close to the Babcock and Wilcox Plant.

[Person E] stated that in August of 1978, [Person F] allegedly was in contact with the Babcock and Wilcox nurse complaining of the same symptoms. In September of 1979 [Person G] was treated by a [Person H] of the Miners Clinic in North Apollo, Pa., for the same symptoms. At that time [Person I] suggested that [Person A] move away from the Babcock and Wilcox Plant in Apollo, Pa. It was around this time that [Person A] moved to his present address.

On October 12, 1979, [Person A] told [Person B] that he returned to the Miners Clinic and saw [Person C] who told him that he was fit to return to work.

[Person E] stated that according to [Person F] he attempted to return to work but was told by the Babcock and Wilcox Personnel Officer, [Person G] that he had abandoned his job, and he was unable to return to work.

[Person E] stated that [Person H] believes that there are several health problems with not only the employees but also the community adjacent to the Babcock and Wilcox Plant. [Person E] had discussed these problems with several individuals including personnel of the Pennsylvania Department of Environmental Resources, of the University of Pittsburgh, of the State Health Department, Pennsylvania State Representative Henry Livengood, of the Governor's Action Line.
According to [Redacted] stated that [Redacted] advised him to contact the Nuclear Regulatory Commission.

[Redacted] stated that [Redacted] is currently undergoing a grievance process between the union and Babcock and Wilcox in an effort to obtain his job back. [Redacted] believed that [Redacted] wanted to wait until this grievance was settled before he considered contacting NRC because both the company and the union consider the Nuclear Regulatory Commission as the "enemy."

Towards the end of the interview, [Redacted] asked if there were any security problems at the Babcock and Wilcox Plant. [Redacted] mentioned that he was aware that someone had taken some radioactive samples from the plant sometime ago (date not recalled), and there was talk of some employees taking radioactive pellets from the Babcock and Wilcox Plant, but these items were later recovered.

[Redacted] told [Redacted] that when he read an article in the newspaper concerning losses of nuclear material when Mr. (Zalman) Shapiro was here, he had to laugh. When [Redacted] asked for an explanation, [Redacted] related the following information which he requested be off the record:

[Redacted] stated that sometime in 1965 or 1966 (during the early part of his employment), he and another individual who he was unable to identify were walking near the loading dock at the Nuclear Materials and Equipment Corporation, Apollo Facility. He observed some people, who he was unable to identify, loading cans into some equipment. According to [Redacted] the cans were of the approximate size and dimension that would contain high enriched uranium, that is, six inches high and three and a half to four inches in diameter. [Redacted] noticed that the shipping papers for the equipment indicated that the material was destined for Israel. He stated that there was a guard with a gun who ordered them to leave the area. As a result of this confrontation, he and his associate left the area. The only individuals on the dock which [Redacted]
provided to [REDACTED] were a foreman by the name of [REDACTED] and a truck driver by the name of [REDACTED]. Both were NUMEC employees, and according to [REDACTED] both are currently employed at the Babcock and Wilcox facility at the present time.

According to [REDACTED], claimed to be a Class VI technician and was employed as a HEX operator in the low enriched area during the 1965 - 1966 period. According to [REDACTED], the loading dock is next to the low enriched area, and, therefore, it would not have been unusual for [REDACTED] to be in the area. [REDACTED] indicated that he did not verify any personnel records at the Babcock and Wilcox Plant to determine if, in fact, [REDACTED] was employed at that facility. However, in his opinion, based on the information furnished by [REDACTED], it was definite that [REDACTED] had a working knowledge of the plant operations, and, therefore, it was his opinion that he worked at that facility.

[REDACTED] stated that he did not go into too much details regarding any diversion of nuclear material from the NUMEC facility since the original purpose of his interview was to discuss any health problems that [REDACTED] had and the allegations that he had made regarding the Babcock and Wilcox Plant.

[REDACTED] was unable to provide any additional pertinent information.
FEDERAL BUREAU OF INVESTIGATION

REPORTING OFFICE
PITTSBURGH

WASHINGTOI FIELD OFFICE

DATE
4/23/80

INVESTIGATIVE PERIOD
3/11/80 - 4/15/80

REFERENCE

Bureau teletype to Pittsburgh dated 3/25/80.
Pittsburgh teletype to Bureau dated 4/7/80.
Pittsburgh teletype to Bureau dated 4/17/80.

CHARACTER OF CASE
ATOMIC ENERGY ACT
OBSTRUCTION OF JUSTICE

ENCLOSURES

Enclosed for Washington Field are the original and one copy each of two FD-302s and original notes regarding interviews of and at Pittsburgh.

ALL INFORMATION CONTAINED FURTHER IN UNCLASSIFIED

DO NOT WRITE IN SPACES BELOW

APPROVED

SPECIAL AGENT IN CHARGE

CON VICTED

PENDING OVER ONE YEAR

PRETIAL DIVERSION

PENDING PROSECUTION

FUG. FINES

OVER SIX MONTHS

ACQUISTION

CASE HAS BEEN:

PENDITNG OVER ONE YEAR

YES NO

OVER SIX MONTHS

YES NO

1 - Bureau (117-2564)
2 - Philadelphia (117-174)
2 - Washington Field (117-273)
1 - Pittsburgh (117-108)

Enc. (6)

RECORDED

5 MAY 1980

Dissemination Record of Attached Report

Notations

- A*

COVER PAGE
UNITED STATES DEPARTMENT OF JUSTICE
FEDERAL BUREAU OF INVESTIGATION

Copy to:

Report of:  
Date: 4/23/80

Field Office File #: 117-108

Title: ZALMAN MORDECAI SHAPIRO

Character: ATOMIC ENERGY ACT
ObSTRUCTION OF JUSTICE

Synopsis: (U) Interviews of Laborer and Truck Driver, Babcock and Wilcox Company, Incorporated, Nuclear Materials Division (B & W, NMD), Apollo, Pennsylvania and Transportation Specialist, B & W, NMD, Apollo, PA, are set forth. Both individuals interviewed regarding their knowledge of possible diversion of Special Nuclear Materials from the Numeck Plant, Apollo, PA, to Israel. Details contained herein.

- RUC -

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Apollo, PA, telephone

was interviewed at his place of employment, Babcock and Wilcox, Nuclear Materials Division, Apollo, PA. After being advised of the identity of the interviewing Agent and the nature of the interview, provided the following information:

advised that he was employed by Nuclear Materials and Equipment Corporation (NUMEC) in approximately 1961 (exact date unknown) and has been continuously employed at the Apollo, PA, nuclear facility until the present.

advised he was initially hired as a laborer in the Maintenance Department, but he believed he worked approximately two months and was transferred to the Shipping and Receiving Department as a laborer and truck driver, where he has worked until the present.

advised that his job included loading trucks and driving the company trucks. He advised that Shipping and Receiving was under the direct supervision of and that was responsible for obtaining trucks, insuring the materials were ready for shipment, insuring the proper documentation was ready, and insuring that the trucks were loaded properly.

stated that on occasion, would help load a truck, but due to union restrictions, help was infrequent. He further stated that is currently the traffic manager for the plant's present owner, Babcock and Wilcox, Inc.

When asked if he recalled any shipment of special nuclear materials or any shipment of equipment to Israel, advised he did recall handling a piece of equipment in the middle or late 60s (month, day and year unrecalled), that told him he was going to Israel.

advised that the equipment consisted of a crate measuring approximately four feet by four feet by four feet, containing a piece of equipment he described as cast metal, like a radiator. He stated he believed the truck was loaded in the early afternoon hours when he was instructed to move the truck.

(U)

Investigation on 4/3/80 at Apollo, PA

by SA

Date dictated 4/7/00

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containing the piece of equipment to the NUMEC Park Township Facility where he believed it was stored for approximately one or two days. Advised that after one or two days' storage, he received instructions from to drive the equipment to New York City for loading aboard a ship. Stated he could not recall exactly, but thought he delivered the crate to Pier 34 in the New York Harbor. He further advised he could not remember what time of year it was, but stated that he remembered leaving in warm rainy weather in Pittsburgh, but encountered icy road conditions, which caused him to be late delivering the crate at New York City. He further recalled receiving a message at a toll booth on the New Jersey Turnpike for him to call and explain why he was late with the delivery. He believed his route of travel was via the Pennsylvania Turnpike to the New Jersey Turnpike. Stated he recalled when he delivered the crate at the pier in New York, there was no delay in off-loading it from his truck directly onto the ship. He further stated he does not recall the name of the ship. Volunteered that he did not know if anything was contained inside the cast metal equipment.

Advised that his normal work area was the loading dock area at the Apollo nuclear facility which consisted of a single truck bay, which adjoined the low enriched uranium manufacturing area. He advised that it would be unlikely that people from the manufacturing area of the Apollo plant would come out to the loading dock, because they were not allowed to do so. He explained that people in the manufacturing area, which he described as the "hot area" wore white uniforms and shoes and were prohibited from entering the outer areas of the plant, including the Shipping and Receiving area, because their uniforms may contain traces of radioactive materials. Stated that people who worked in the Shipping and Receiving areas and other non-contaminated areas wore blue uniforms and everyone in the plant knew exactly where the dividing lines were between the clean areas and the "hot areas."

Advised that he knew Dr. Zelman Shapiro (phonetic), NUMEC's owner, only by sight, but stated he
had observed Dr. Shapiro walking through the plant usually about two times per week. [further advised he had heard that Dr. Shapiro roamed freely in the plant at any time of day or night, but rarely talked with any of the employees. [advised he at no time ever observed Dr. Shapiro during the evenings on the loading dock, nor could he remember ever seeing Dr. Shapiro at the NUMEC facility during the evening hours.

[advised he remembered doing one favor for Dr. Zelman Shapiro, which consisted of moving a glass cabinet from Dr. Shapiro's office at NUMEC to his Squirrel Hill home on his departure from NUMEC. [stated that in this instance, it was not Dr. Shapiro, but [who asked him to move the cabinet for Dr. Shapiro.

When [was asked how he knew the difference between high enriched and low enriched materials, he provided the following descriptions: He stated that high enriched materials were always packed in a silver-colored can that were approximately the size of a one-quart paint can. He stated low enriched materials, however, were shipped in two-gallon buckets that were much larger and weighed approximately 60 pounds. [further stated that high enriched materials were always shipped by taking a small container and placing it in a larger container, which he described as a 6M can, approximately the size of a five-gallon can, which contained formiculite insulation and was sealed with a snap ring.

[advised that the only other person who might have been aware of any equipment or materials being shipped out of the country was the shipping clerk, [who prepared the bills of lading. [then stated he could recall no further information concerning this incident.

The following description of [was obtained through observation and interview:

Name
Date of Birth
Place of Birth
<table>
<thead>
<tr>
<th>Race</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Male</td>
</tr>
<tr>
<td>Height</td>
<td>6'</td>
</tr>
<tr>
<td>Weight</td>
<td>220 pounds</td>
</tr>
<tr>
<td>Frame</td>
<td>Large</td>
</tr>
<tr>
<td>Hair</td>
<td>Grey</td>
</tr>
<tr>
<td>Eyes</td>
<td>Hazel</td>
</tr>
<tr>
<td>Complexion</td>
<td>Medium</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married,</td>
</tr>
<tr>
<td>U.S. Army Service</td>
<td>Apollo, PA</td>
</tr>
<tr>
<td>U.S. Army Serial #</td>
<td></td>
</tr>
<tr>
<td>Social Security #</td>
<td></td>
</tr>
<tr>
<td>Present Residence</td>
<td></td>
</tr>
<tr>
<td>Scars, Marks and Tattoos</td>
<td></td>
</tr>
</tbody>
</table>
Pennsylvania, telephone number: [redacted] was inter-
viewed at his place of employment, Babcock and Wilcox, Nuclear
Materials Division, Apollo, Pa. After being advised of
the identity of the interviewing Agents and the nature of
the interview, Desmond provided the following information:

[redacted] advised that he was employed by the Nuclear
Materials and Equipment Corporation (NUMEC) on February 15,
1960, as a Quality Control Supervisor. He then stated that
sometime during 1962 or 1963, NUMEC appointed him Transportation
Supervisor, a job he retained until June, 1979, during the
changes in ownership from NUMEC to Atlantic Richfield Company
to the present owner, Babcock and Wilcox, Inc. In June,
1979, Babcock and Wilcox appointed [redacted] to his present
position as a Transportation Specialist.

[redacted] advised that in his job as Transportation
Supervisor, his office was located on the loading dock in
the main production facility at Apollo, Pa. [redacted] related
that there were other NUMEC facilities located at Parks
Township, Pa., and Quehanna, Pa., but that any shipping
done from these facilities was done through his office at
the main Apollo plant. [redacted] advised that during the
1960's, [redacted] a Shipping Clerk, was also
located in his office beside the loading dock at Apollo, Pa. [redacted]
advised his own job required him to arrange for air, sea
and land transportation for shipments of materials leaving
the NUMEC facilities. [redacted] then stated that [redacted]
job was to prepare the documentation for each shipment and
insure the loads were arranged properly. [redacted] then related
that both he and [redacted] had access to the accounting
records concerning the manufacture and shipment of any nuclear
materials produced by NUMEC. Both men had access to special
nuclear materials when they were delivered to the loading
dock for shipment and while they were aboard NUMEC company
trucks.

[redacted] advised that in order to ship products,
a "shipper's list" was sent to his office after having been
signed off by representatives from the following departments
at NUMEC: Health, Nuclear Safety, Security, Accountability,
and finally Shipping. Related that low-enriched nuclear materials were packed by the Shipping Department and loaded aboard the trucks at the loading dock. He stated that high-enriched nuclear products were loaded by the vault handlers into special packaging in the "hot cell," which he described as a clean room where manipulator arms were used to handle the materials. The high-enriched products were loaded into "casks with cooling fins" and closed in the hot cell before they were delivered to the loading dock. Stated the only function performed on the loading dock was to place a final seal on these casks and then load them aboard the trucks. Storage of nuclear materials was not allowed on the loading dock; therefore, they had to be immediately loaded aboard trucks and dispatched to their destination. Further advised that the shipper's list usually noted what kind of material was located within these casks, but under no circumstances were the casks opened on the loading dock to verify either the type of substance or the amount. Stated they always took the vault handler's word for what was contained in the shipping containers. Stated the aforementioned casks always contained "hot" materials and were delivered to the loading dock by the vault handlers rather than day laborers from the loading dock entering the plant to obtain the shipping containers. Then stated that employees working in the manufacturing areas of the Apollo facilities wore white coveralls and shoe covers and there were specific limits within the plants to which these people had access. Similarly, those people who worked on the loading dock in the non-manufacturing areas wore blue coveralls with no shoe covers and were not allowed to walk inside the plant. Stated that some of the high-enriched materials, which he described as 20% uranium, arrived at the loading dock in temporary storage containers known as stovepipes, which were made out of corrugated sheet metal. Stated that contained in these stovepipes would be three smaller containers, measuring approximately 3" x 8", which his shipping personnel removed from the stovepipe and placed in a single steel container, known as a 2R inner container. This container was then placed in another drum, he described as a 55 gallon drum with insulation, and sealed for shipping. Stated this is the only time he or his personnel come in contact with any high-enriched uranium products.
When asked if he recalled any shipment of special nuclear materials or equipment to Israel, [redacted] advised he recalled at least four separate nuclear material shipments to Israel as set forth below:

1. On approximately October 26, 1962 or 1963 (remembered because date coincides with [redacted] advised he received a shipper's list requiring him to load one cask with cooling fins aboard a three-ton NUMEC company truck for shipment to New York City. [redacted] recalled he thought this particular shipment contained Strontium 90. [redacted] advised the cask was loaded in the afternoon or early evening hours and prepared for shipment early the next morning. [redacted] advised that Dr. Zalman Shapiro called him at home early in the morning of the following day and told him to move the shipment immediately to its destination. [redacted] advised he arrived at work early in the morning, perhaps 7:00 AM, and was then told by Dr. Shapiro to unload the truck, that the shipment had been canceled. The truck was duly unloaded according to Dr. Shapiro's order, but at approximately 11:30 AM on the same morning, Dr. Shapiro called [redacted] and told him to reload the truck, the material had to be in New York City by 4:00 PM that day. [redacted] advised he dispatched the load driven by company driver [redacted] approximately noon of the same day. [redacted] then advised that frequently (possibly hourly) Dr. Shapiro called him to determine the progress of the truck. Dr. Shapiro advised that he had left messages at turnpike toll booths for his driver, [redacted] to report his progress. [redacted] then stated the truck finally arrived at its destination, Pier 32, Zim-Israel Steamship Lines, New York City, New York, at approximately 2:30 AM the following day. [redacted] related that [redacted] stated the cargo was off loaded directly from the back of the truck immediately on to the ship (name unknown). [redacted] provided the following telephone contact from his personal telephone index, which he believed was related to this shipment:

[redacted] advised that he believed this shipment occurred around the time of the B52 bomber crash in Spain, because at the time Spain did not allow the presence of nuclear materials on its soil, due to the loss of the atomic bombs contained on the B52. [redacted] stated he recalled the ship's original destination.
was Barcelona, Spain, then to Haifa, Israel, but had to be rerouted to Haifa, Israel, first.  

2. ____ then recalled that between October, 1964, and September, 1965, he shipped a "remote weather station," which he described again as a large cask with cooling fins containing hot material, to Israel. ____ advised the method of shipment was again by truck to New York City, then aboard a Zim-Israel Steamship Lines ship to Israel. ____ could not recall the exact destination, name of the ship, nor the contents of the cask, again citing the fact that he took the vault handler's word on the materials contained in the cask, inasmuch as opening this type of container would expose himself and his crew to extreme danger. ____  

3. ____ advised that during the late summer or early fall of 1965 (exact time period unknown) he was told by Dr. Shapiro to personally take a crate containing unknown materials to New York City. ____ advised the crate measured approximately 3½' x 3½' x 3½' and he believed it may have contained radioactive material. ____ advised he personally took the crate, as directed by Dr. Shapiro, to TWA Airlines at Greater Pittsburgh International Airport (GPIA) and accompanied the crate to New York city, New York, where he personally delivered the crate via rented station wagon to a representative of the Israeli Defense Ministry (name unknown) in Manhattan, New York. ____ related that prior to his departure, Dr. Shapiro told him to call the Israel Consul if he needed any help. Again ____ provided from his personal telephone index the following name at the Israeli Consulate: 

               telephone number:  

               home telephone number:  

4. ____ advised that in approximately September, 1966, Dr. Shapiro again told him to personally escort a shipment from the NUMEC Facility at Quehanna, Pa., to the Newark, New Jersey, area. ____ described the NUMEC Facility at Quehanna, Pa., as the site of an experimental nuclear reactor previously owned by Penn State University. ____ advised he was also accompanied on this trip by ____ (phonetic), a NUMEC Safety Official, and ____ (phonetic), a NUMEC Contracts Administrator. ____ recalled that this shipment consisted of two crates, one measuring approximately
8' x 10' x 8', and the second crate measuring approximately 4' x 5' x 4'. These crates were marked with radioactive symbols. He stated he recalled this shipment was escorted to the Pennsylvania-New Jersey border by the Pennsylvania State Police and was monitored in New Jersey by the New Jersey Department of Health. Then advised that unlike the previous shipments, this shipment was delivered to the Maheir Steamship Lines at Newark, New Jersey. Related that upon arrival at the Maheir Lines docks, the crates were off loaded directly from the trucks into the ship's hold. Advised he believed the name of this particular ship was the Yafo, which he recalled had a destination of Haifa, Israel.

Could not recall any other instances of shipment of nuclear materials to Israel nor any other specifics about the foregoing shipments. Further advised he could not recall ever shipping any materials to any other country but Israel and further related that it was highly unusual that materials would be taken directly from the backs of the trucks on to ships. He stated it was his experience that materials are usually removed from incoming trucks and placed in a warehouse prior to being loaded on a ship.

Then advised that NUMEC's shipping agent in New York City who handled the arrangements with both Zim-Israel and Maheir Steamship Lines was W. J. Burns and Company, New York City, New York.

Advised that until approximately 1978, the Apollo Nuclear Facility handled low-enriched uranium, high-enriched uranium products and plutonium products, further advising that plutonium products normally were shipped from the Parks Township Facility. Advised that the casks with the cooling fins were usually reserved for those materials that were highly radioactive, such as the highly-enriched uranium or plutonium products.

When queried as to his relationship with Dr. Shapiro, advised that their relationship was strictly a boss-employee type of relationship. Described Dr. Shapiro as a very difficult, demanding man to work for, as he would call and demand action on very short notice.

Described Dr. Shapiro as a very fair man and that he would place a requirement on an employee but leave it
up to the employee as to how he accomplished it.\[\ldots\]

further advised that he can recall only doing one favor for Dr. Shapiro and advised that when Dr. Shapiro left NUMEC, the company driver, \[\ldots\] moved a glass cabinet from Shapiro's office at NUMEC to his home in the Squirrel Hill Section of Pittsburgh, Pa.

\[\ldots\] advised that Dr. Shapiro made frequent visits at odd hours to the manufacturing area of the NUMEC, Apollo Facility, but rarely said more than hello to the employees. \[\ldots\] advised that Shapiro would often see something wrong and would tell the employee to correct it or contact the employee's supervisor to see that a correction was made. He described Dr. Shapiro as a very calm man.

\[\ldots\] advised that he was aware and it was common knowledge throughout the Apollo, Pa., Facility that Dr. Shapiro made several trips to Israel during the 1962-1966 time frame. \[\ldots\] could not, however, align Dr. Shapiro's trips with any shipments made to Israel, nor could he recall any phone calls received from Dr. Shapiro while he was in Israel.

\[\ldots\] did recall receiving phone calls from \[\ldots\] a NUMEC Engineer, who was located in Israel. He recalled that \[\ldots\] would request items from the NUMEC machine shop, located at Parks Township, Pa. \[\ldots\] could not recall the items requested by \[\ldots\] that were shipped to Israel.

At the conclusion of the interview, \[\ldots\] provided another name contact for Zim-Israel Shipping Lines as follows: Zim-Israel Lines Representative \[\ldots\] telephone number: \[\ldots\] then advised that there is a possibility that the shipping records for the time period 1962-1966 are still maintained by the Accountability Department at the Apollo Nuclear Facility.
In Reply, Please Refer to File No.

UNITED STATES DEPARTMENT OF JUSTICE
FEDERAL BUREAU OF INVESTIGATION
Pittsburgh, Pennsylvania

March 25, 1980

FORMER EMPLOYEE OF NUCLEAR MATERIALS AND EQUIPMENT CORPORATION,
APOLLO, PENNSYLVANIA;
ATOMIC ENERGY ACT

On March 21, 1980, was interviewed at his residence and provided the following information:

This document contains neither recommendations nor conclusions of the FBI. It is the property of the FBI and is loaned to your agency; it and its contents are not to be distributed outside your agency.
was interviewed at his residence. After being advised of the identities of the interviewing Agents and the nature of the interview, provided the following information:

advised that he was employed by Nuclear Materials and Equipment Corp. (NUMEC) in February, 1965, (exact date unknown) and was continuously employed at the Apollo, Pa., facility through two ownership changes until October, 1978. advised that he was fired in October, 1978, by the present owner, Babcock and Wilcox, Inc., for job abandonment following an alleged job related illness.

advised that upon being hired at NUMEC, he was given three days of schooling on the equipment he was to operate and briefed by the Personnel Manager and Low Enrichment Facility Foreman concerning the security measures at the Apollo facility nuclear plant. He then commenced his production line job upon completion of this brief schooling. related that his exact position was Senior Ammonator Operator in the Low Enriched Operations area, which was immediately adjacent to the loading dock area of the Apollo nuclear facility. further described the NUMEC Apollo plant as being broken down into four areas: the Low Enriched area, the High Enriched area, the Sphere area, and the Peletizer area. He advised that although his full-time job was on the Low Enriched Area Ammonator, he worked overtime in the High Enriched area on several occasions.

advised in late March or early April, 1965 (exact date unknown) while working on a swing shift from 3:30 p.m. until 12:00 a.m., his Ammonator was shut down between approximately 9:00 and 10:00 p.m. in the evening. He stated that because of the negative air pressure within the plant area, conditions were usually very warm so he walked out to the loading dock for a breath of air. The loading dock was located approximately 20 feet from his equipment through a single door. advised that
employees often went to the loading dock to get a breath of air and further said he thought he remembered an employees eating area on the dock.

related that when he entered the loading dock area on this particular evening, he noticed a flatbed truck backed up to the loading dock with some strange equipment on it. He described the equipment as several steel cabinets with some kind of gauges on the front of them and other equipment which looked like a lathes. opined the equipment may have come from the Peletizer area of which he was not familiar. advised he then noticed the NUMEC owner, Dr. Zalman Shapiro, pacing around the loading dock while (Shipping and Receiving Foreman) and (truckdriver for NUMEC) were loading "stove pipes" into the steel cabinet type equipment that he observed on the truck. recalled that there were four or five of the steel cabinets on the flatbed truck. stated that and never loaded trucks themselves, always employing other workers.

stated that the "stove pipes" are cylindrical storage containers used to store canisters of high enriched materials in the vaults located at the Apollo nuclear facility.
stated that the "stove pipes" contained three or four canisters which were described as highly polished aluminum with standard printed square yellow labels, approximately three inches in diameter by six inches tall, that normally were used to store high enriched uranium products which defined as 95 percent uranium.

stated that he observed two workmen, whose names he could not recall, bringing the "stove pipes" from the High Enriched vault area located approximately 150 feet from the docks to the dock area where and opened the "stove pipes" and withdrew the canisters located in the "stove pipes". He then said checked the label on each canister for information and checked it off on a shipping order he had attached to a clipboard.
advised that the canisters were then replaced in the "stove pipe" and then the "stove pipe" itself was loaded into the cabinet type equipment after being wrapped with a brown paper type insulation. advised that he observed one cabinet being loaded and that the "stove pipes" were placed one in each back corner of the cabinet and one in the front center of the cabinet directly behind the door.

described the canisters found in the "stove pipes" as approximately three inches by six inches, bright polished aluminum canisters with yellow labels containing typewritten information and nuclear "fan" symbols in the upper corners of the label. said he had
never observed typewritten information on the labels that
he had previously seen on the dock.

advised he was sure this was High En-
riched uranium products due to the size and shape of the
container and the labeling. He stated that the containers
he used in the Low Enriched area were much larger than the
canisters he observed and used a different label

stated he had never seen "stove pipes"
used as shipping containers but whenever High Enriched
uranium products were shipped, the canisters were unloaded
from the "stove pipes" and loaded into cement lined steel
drums. further advised that the route the workmen
transporting the "stove pipes" used took them away from
the Low Enriched area and brought them onto the dock through
a different door. The Low Enriched materials vaults were
located approximately 50 feet from the dock area down an
angled corridor. said the normal route for High
Enriched materials from the High Enriched vaults was down
the same corridor where the Low Enriched vaults were lo-
cated.

citing his natural curiosity, stated
he observed lay his clipboard down on an empty
drum located on the dock, whereupon proceeded
to read the information contained on the shipping order.
He said he noticed that the destination for the equipment
on the truck was Israel, and that it was to be transported
by ship. He recalled that the ship had a long foreign name
which he believed to be Greek, and its location at the time
was in New York City.

advised that he believed the ship's
name was Greek because when he was in the U.S. Navy (1956-60),
he was a radio man third class stationed at the Naval Radio
Facility, Londonderry, Northern Ireland, and had handled
messages from Greek shipping among others.

stated that after he had quickly read
the information contained on the shipping order, grabbed the clipboard away from him, telling him in words
to the effect that the material contained in the shipping
order was confidential and not for his eyes. advised that shortly thereafter, an armed guard ordered
him off the loading dock. stated he did not ob-
serve anybody call the armed guard nor did he see the guard
on the dock, but that he believed the guard came from one
of the hallways adjoining the dock. stated that
he was on the loading dock for approx. 15 minutes
and that at no time did Dr. Shapiro, or
or anybody else ask him to leave.
further advised that it was highly unusual to see Dr. Shapiro in the manufacturing section of the Apollo nuclear facility; it was unusual to see Dr. Shapiro there at night; and very unusual to see Dr. Shapiro so nervous as to pace around. described Dr. Shapiro as a very calm, cool and collected man who never got upset.

advised that the only records and documentation he had access to were the shift productions records for the Low Enrichment Area and then only during the specific shift on which he was working. He stated that at the completion of each shift, the records were removed from the manufacturing area and taken across the street to the administrative offices.

advised that most of the shipping was normally done at daytime but did state that occasionally there was some shipping activity in the early evenings. He stated it was highly unusual though that any equipment would be shipped at night.

advised that he had not seen previously the equipment he noted on the loading dock and flatbed trailer and that he had not seen the equipment subsequent to that incident or any equipment like it in the NUMEC Apollo nuclear facility.

stated he became aware of the alleged diversion of nuclear materials through newspaper articles which caused him to think. He said that "everyone" at the plant knew there were losses of materials from the High Enriched area but nobody seemed to care during the time the facility was owned by NUMEC. He stated when Atlantic Richfield Company purchased NUMEC, the losses stopped. further stated that newspaper accounts of the alleged diversion mentioned Doctor Shapiro, and he recalled that just prior to the previously mentioned incident, it was an open plant rumor that Doctor Shapiro had just returned from an extensive vacation in Israel.

advised he had not come forward before because he had a large family to support and the day following the incident, the plant Personnel Manager (name unrecalled) of NUMEC threatened to fire if he "did not keep his mouth shut" concerning what he had seen on the loading
dock the night before. Further advised he mentioned the threat he received from the Personnel Manager to his union steward, whereupon claims he was visited by "some union goons" from Kittanning, Pa., and again told to keep his mouth shut.

stated the prevailing attitude at the plant in 1965 by management, union and the employees was that the Atomic Energy Commission was the enemy looking for a reason to shut the facility down with the resultant job losses. In addition, he stated he did not know how or who to contact in authority who would take action.

advised that he could recall no other information concerning this incident which occurred in late March or early April, 1965.
TO: DIRECTOR, FBI (117-2564)
ATTN: CRIMINAL INVESTIGATIVE DIVISION,
TERRORISM SECTION

FROM: SAC, PITTSBURGH (117-108) (RUC)
SUBJECT: DIVERT

Re Bureau teletype to Pittsburgh dated 3/7/80; and

Enclosed for the Bureau are the original and four
copies of LHM captioned [FORMER EMPLOYEE
OF NUCLEAR MATERIALS AND EQUIPMENT CORPORATION, APOLO,
PENNSYLVANIA; ATOMIC ENERGY ACT]. Enclosed for Philadelphia
is one copy of LHM for information. Enclosed for Washington
Field are one copy of the LHM, the original PD-302, interview
of [CENSORED] and notes.

For the information of the Bureau and other offices,
instant matter is now carried as PG 117-108, formerly carried
as PB 97-123.

On 3/21/80, [CENSORED] was interviewed at his
home concerning his knowledge of alleged diversion of special
nuclear materials to Israel [CENSORED] 11/7-2/76-520
advised interviewing Agents that he presently
has an outstanding grievance being processed by the union and
Babcock and Wilcox, Inc. (B&W) over his firing in 10/79.

1 - Bureau (Encs. 5) ENCLOSURE
2 - Philadelphia (117-174) (Seq. 12) (Enc. 1)
2 - Washington Field (117-273) (Encs. 3)
1 - Pittsburgh
JPO/drg
1 - AAG-CG-155
2 - 60SHIREBUNOE TAFe
(8)

Approved: ________ Transmitted (Number) (Time) Per ________

SECRET
CLASSIFICATION:
TOP SECRET
SECRET
CONFIDENTIAL
UNCLASSIFIED
UNCLASSIFIED

Date 3/25/80

DECLASSIFY ON: 11/26/83
REASON: 14 (D)

(00: WASHINGTON FIELD)
_______ stated he began having health problems in 1973, which he claims are job related, and was disabled. _____ advised that he had contacted every state and Federal agency that might help concerning alleged past and present health problems to both himself and the residents of the Apollo, Pa., area who are exposed to the B&W nuclear facility. _____ claims he was disabled in 7/78, and attempted to return to work in 10/79, at which time he was advised by B&W personnel that he had abandoned his job._______ claimed he was disabled until 10/79; therefore, he filed the grievance.

_______ then advised he does not want to return to work at the B&W Apollo facility because he is fearful that his health will deteriorate further. _______ further suggested he is fearful of "Union Goons" taking retribution for his speaking out about health concerns.

Inasmuch as requested investigation is completed, UACB, Pittsburgh considers this matter RUC.
PO BOX 019 0410Z
PP HQ PH WFC
DE PG

P 085 0410Z MARCH 80
F / PITTSBURGH (117-108) C

TO DIRECTOR (117-2564) PRIORITY
PHILADELPHIA (117-174) (SC 12) PRIORITY
WASHINGTON FIELD (117-273) PRIORITY

UNCLAS

ATTENTION: CRIMINAL INVESTIGATIVE DIVISION, TERRORISM SECTION
DIVERT, APA, (CO: WFC)

PE BULLET TO PG DATED MARCH 7, 1980, AND PHTEL TO PG DATED
MARCH 11, 1980.

ON MARCH 21, 1980, SAS

PG FBI, INTERVIEWED

POSSIBLE KNOWLEDGE ABOUT ALLEGED DIVERSION OF SPECIAL NUCLEAR
MATERIALS FROM NUCLEAR MATERIALS AND EQUIPMENT CORPORATION (NMAC)
TO ISRAEL.

ADvised that in LATE MARCH/EARLY APRIL 1980 (EXEC

0-73
AAG CO ISS
TAFE
3/25/80
RM5/BJS

97 JUN 4 1980

Confidential
DATE UNRECALLED) AT APPROXIMATELY 12 PM IN THE EVENING WE WALKED ONTO THE NUMEC (APOLLO FACILITY) LOADING DOCK. WE OBSERVED WORKERS BRINGING SILVER COLORED CANNISTERS WITH YELLOW LABELS FROM A VAULT AREA TO THE LOADING DOCK. TWO OTHER NUMEC EMPLOYEES, __________ (LOADING DOCK FOREMAN) AND __________ (NUMEC TRUCK DRIVER), WERE OBSERVED BY __________ TO CHECK OFF EACH CANNISTER AGAINST A SHIPPING ORDER FORM AND PACK THE CANNISTERS IN STEEL CABINETS WITH GAUGES ON THE DOORS. __________ SAID HE HAD NOT SEEN EQUIPMENT LIKE THE CABINETS BEFORE OR AFTER THIS INCIDENT AT NUMEC.

DURING THE LOADING OPERATION, __________ ADVISED HE OBSERVED DR. ZALMAN SHAPIRO, OWNER OF NUMEC, PACING AROUND THE DOCK. __________ ADVISED IT WAS UNUSUAL TO SEE DR. SHAPIRO IN THE MANUFACTURING PART OF THE PLANT AND EVEN MORE UNUSUAL TO SEE HIM AT 12 PM AT THE FACILITY. __________ ADVISED MOST OF THE SHIPPING WAS DONE DURING THE DAY.

__________ ADVISED THAT DURING THE 10 - 15 MINUTES HE WAS ON THE LOADING DOCK, HE DID NOT OBSERVE ANY PACKING LISTS (U) OR SHIPPING DOCUMENTS ATTACHED TO THE LOADED EQUIPMENT BUT DID READ A SHIPPING ORDER ATTACHED TO A CLIPBOARD THAT
Laid down on an empty drum, said he remembered the destination was Israel via ship from New York City. The name of the ship was unrecalled, but said it was long foreign name he believed to be Greek. (U) Confidential

Advised when observed him reading the shipping order he grabbed the clipboard, telling

In words to the effect that the information on the shipping order was confidential and not for him.

Shortly thereafter advised he was ordered to leave the loading dock by an armed guard and did not see the equipment again. Had not seen the guard on the dock and did not recall seeing anybody make a call for the guard.

Administrative: Advised he does not want to return to work at the Apollo facility because of health concerns, threats made by the personnel manager and threats by his union to keep his mouth shut, at the time of the incident.

Advised that he had not previously reported the incident because of threats, lack of knowledge of who to report the incident to, and his inclination not to get involved in something that was not his business.
ADvised he was continuously employed by the Apollo Facility from February, 1965, until October, 1978, through two ownership changes, from NUKEC to ARCO to Babcock and Wilcox Inc. (B&W). B&W fired [redacted] in October, 1978, for job abandonment, following an illness [redacted] claims is job related. [redacted] claims a union grievance is pending. LHM follows.
ATTENTION CRIMINAL INVESTIGATIVE DIVISION, TERRORISM SECTION
DIVERT, ATOMIC ENERGY ACT, 00: WFO

REFERENCE PITTSBURGH TELETYPENO THE BUREAU DATED, MAY 6, 1980.

ON MAY 9, 1980 FORMER NUMEC EMPLOYEE, MARLIN J. EBERT WAS INTERVIEWED REGARDING HIS KNOWLEDGE OF SHIPPING
PROCEDURES ACCESS TO SPECIAL NUCLEAR MATERIALS, ACCOUNTING
RECORDS FOR NUCLEAR MATERIALS AND OTHER INFORMATION
PERTAINING TO STANDARD OPERATING PROCEDURES AT NUMEC.

EBERT WAS EMPLOYED AS A PROJECT ENGINEER AND SUPERVISOR
OF RADIATION PROCESS DEVELOPMENT AT NUMEC FROM OCTOBER, 1968
TO JUNE 1970. HE HELD A "Q" CLEARANCE FROM THE UNITED STATES.

97 JUN 6 1980
ATOMIC ENERGY COMMISSION AT THE TIME. FROM JUNE 15, 1972 TO JULY 31, 1976 HE WAS EMPLOYED AS A MARKETING AND PRODUCT DEVELOPMENT SPECIALIST BY GENERAL ELECTRIC COMPANIES, VALLECUROS NUCLEAR REACTOR, PLEASANTON, CALIFORNIA. ON JULY 31, 1976 HE BECAME PRESIDENT OF HIS OWN COMPANY, LIVERMORE ENGINEERING LABORATORIES, 4049 FIRST STREET, LIVERMORE, CALIFORNIA AND CONTINUES TO CONDUCT THE AFFAIRS OF THAT COMPANY. HE CURRENTLY HOLDS ELECTIVE OFFICE AS A CITY COUNCILMAN FOR THE CITY OF LIVERMORE.

EBERT ADVISED HIS RESPONSIBILITIES AT NUMEC DID NOT REQUIRE ACCESS TO SPECIAL NUCLEAR MATERIALS, ALTHOUGH HIS CLEARANCE PERMITTED ACCESS. AT NO TIME DID HE REQUEST ACCESS TO SUCH MATERIALS. HIS RESPONSIBILITIES AT NUMEC WERE TO DESIGN SHIPPING CONTAINERS FOR COBALT 60 AND HE WAS INVOLVED IN THE SHIPMENT OF COBALT 60 TO ISRAEL. HE EXPLAINED NUMEC OWNED FIFTY PERCENT OF SUBSIDIARY LOCATED IN ISRAEL KNOWN AS ISOMED, THE ISRAELIS OWN THE OTHER FIFTY PERCENT OF THE COMPANY. COBALT 60 WAS SHIPPED FROM NUMEC TO ISOMED AND WAS TO BE UTILIZED AS FIELD IRRADIATOR DESIGNED FOR DISINFESTATION OF POTATOE SPROUTS.
EBERT DESIGNED THE SHIPPING CONTAINERS FOR COBALT 60 WHICH HE DESCRIBED LEAD CASKS, FIVE FEET BY THREE FEET WHICH WERE ENCASED IN WOODEN BOXES, FIVE FEET BY FIVE FEET BY SEVEN FEET.

DURING LATE 1969 OR 1970 EBERT PREPARED SHIPPING CONTAINERS FOR ONE LARGE SHIPMENT OF COBALT 60 TO ISRAEL. NUMEC HAD SENT BETWEEN TWENTY TO FORTY SMALLER SHIPMENTS TO ISRAEL IN CONTAINERS DESCRIBED AS TWO INCH BY THREE INCH CUBES FOR USE IN A "SNAP" GENERATOR BUT HAD NOT SENT A SHIPMENT OF SUCH PROPORTION AS THIS PARTICULAR ONE. THE FIVE FEET BY THREE FEET SHIPPING CONTAINERS DESCRIBED ABOVE WERE UTILIZED ON THIS OCCASION.

EBERT REMARKED THERE WAS A DEVIATION FROM USUAL SHIPPING PROCEDURES IN THIS INSTANCE IN THAT THE SHIPPING CONTAINERS WERE PACKED AND SEALED LATE AT NIGHT BY NUMEC EMPLOYEE AND HIS CREW. EBERT WAS NOT PRESENT AT NIGHT TO WITNESS THE PACKING PROCEDURES.

EBERT REMARKED THERE WAS EXCESS SPACE IN THE LEAD CASKS AFTER THE COBALT 60 WAS PACKED AND OTHER MATERIALS COULD BE PLACED INTO THE CASKS IN ADDITION TO THE COBALT 60 IF SOMEONE...
PAGE FOUR SF 117-273

DESIRED TO SHIP THEM IN THIS MANNER. HE ADVISED HE HAD NO KNOWLEDGE THAT ANYONE DID IN FACT PLACE OTHER ITEMS IN THE CASKS BUT CommentED WITH THIS PARTICULAR SHIPMENT HE PLACED A PACKAGE OF CIGARETTES AND NYLONS IN ONE CASk WITH A NOTE TO UNSPECIFIED ISRAELIS. HE DID THIS AS A FRIENDLY GESTURE AND SUBSEQUENTLY RECEIVED A NOTE OF APPRECIATION FROM THE INDIVIDUALS WHO RECEIVED THE PACKAGES. HE PLACED THE ITEMS IN THE SHIPPING CASk BEFORE THEY WERE TURNED OVER TO FOR PACKING. IS PRESENTLY EMPLOYED BY WESTINGHOUSE IN PITTSBURGH, PENNSYLVANIA.

THIS LARGE SHIplement OF COBALT 60 WAS PLACED ON A TRUCK OPERATED BY TRI STATE SHIPPING FOR TRANSPORTATION TO NEWARK, NEW JERSEY. NUMEC PROVIDED ESCORT TO THE NEW JERSEY BORDER AND ADDITIONAL ESCORT WAS THEN PROVIDED BY NEW JERSEY STATE AUTHORITIES. THE SHIPMENT WAS TAKEN TO THE MAHEIR STEAMSHIP LINES DOCKS AT NEWARK, NEW JERSEY AND PLACED ON BOARD AN ISRAELI SHIP FOR TRANSPORTATION TO HAIFA. NUMEC EMPLOYEES, AND EBERT ESCORTED THE ABOVE SHIPMENT UNTIL IT WAS PLACED ON BOARD THE FANTAIL OF THE ISRAELI SHIP.
EBERT ADVISED HE HAD NO KNOWLEDGE OF ACCOUNTING PROCEDURES AT NUMEC NOR DID HE HAVE ACCESS TO ACCOUNTING RECORDS. IT WAS GENERAL KNOWLEDGE AMONG EMPLOYEES AND PERSONS OUTSIDE THE COMPANY THAT NUMEC WAS "CASH POOR" AND CUT CORNERS IN ITS ACCOUNTING PROCEDURES. IT WAS ALSO WELL KNOWN THERE WAS A DISCREPANCY IN ACCOUNTING FOR A SIZABLE QUANTITY OF SPECIAL NUCLEAR MATERIAL. DURING THE LATE NINETEEN SIXTIES NUMEC'S ACCOUNTING PROCEDURES WERE ALMOST A JOKE AND THERE WAS A FLIPPANT ATTITUDE CONCERNING THEM.

EBERT STATED HE WAS CASUALLY ACQUAINTED WITH NUMEC PRESIDENT AND OWNER, DOCTOR ZALMAN M. SHAPIRO, BUT DID NOT ASSOCIATE WITH HIM OFTEN.

HE ADVISED HE HAD NO KNOWLEDGE OF UNAUTHORIZED SPECIAL NUCLEAR MATERIALS BEING DIVERTED TO ISRAEL ALTHOUGH HE HAD HEARD RUMORS AND SEEN REPORTS IN THE NEWS MEDIA ALLEGING NUMEC HAD DIVERTED SPECIAL NUCLEAR MATERIALS TO ISRAEL.

EBERT STATED HIS OPINION THAT SPECIAL NUCLEAR MATERIALS COULD HAVE BEEN SHIPPED TO ISRAEL FROM NUMEC FOR ALTRUISTIC REASONS. DOCTOR SHAPIRO AND OTHERS AT NUMEC WHILE BEING LOYAL UNITED STATES CITIZENS WERE ALSO CONCERNED FOR THE...
WELFARE OF ISRAEL. EBERT EMPHASIZED THIS WAS ONLY A
POSSIBILITY AND AGAIN STATED HE HAD NO KNOWLEDGE OF AN
DIVERSION. EBERT STATED HIS OPINION THAT SPECIAL NUCLEAR MATERIALS
COULD HAVE BEEN SHIPPED TO ISRAEL FROM A PLANT SUCH AS NUMEC
BY CONCEALING SAME IN CASKS WITH COBALT 60. LIKELIHOOD OF
CUSTOMS OFFICIALS OR SHIPPING PERSONNEL EXAMINING CONTENTS
OF SUCH A CONTAINER WOULD BE REMOTE BECAUSE OF DANGER OF
CONTAMINATION FROM THE COBALT 60.

EBERT SUGGESTED FORMER NUMEC EMPLOYEES, BE INTERVIEWED FOR THEIR INSIGHT INTO
OPERATIONS AT NUMEC. WAS A HEALTH PHYSICIST AT
QUEHANNA, PENNSYLVANIA AND CURRENTLY RESIDES AT MAELU,
MASSACHUSETTS. WAS A HEALTH PHYSICIST AT NUMEC AND
LIVED ON NEVILLE STREET IN PITTSBURGH, PENNSYLVANIA A FEW
YEARS AGO.

LEADS FOR INTERVIEW OF THE ABOVE MENTIONED NUMEC
EMPLOYEES ARE BEING LEFT TO WFO AS OFFICE OF ORIGIN IN VIEW
OF THE FACT THAT SAN FRANCISCO DOES NOT KNOW WHETHER THEY
HAVE ALREADY BEEN INTERVIEWED.
On December 3, 1980, Washington, D.C. (WDC), was interviewed at his office at 1200 18th Street, N.W., WDC, Room ______. I advised that he was previously employed at NUMEC, Apollo, Pennsylvania, from May, 1963, to September, 1970, when he resigned from his position. He stated that all but the last year of his employment, he was located at the plutonium laboratory of NUMEC working as a Health Physicist. The final year of his employment was spent at the corporate headquarters, where he had responsibility for monitoring shipping. His immediate supervisor at the time was ______.

I advised that he knew Dr. Zalman M. Shapiro, head of NUMEC, on a professional basis, having frequent contact with him at the plant facility. He described Shapiro as an intelligent man with little administrative ability, but of high character and integrity.

I stated that he had responsibility for monitoring shipping of nuclear material from the NUMEC facility in the sense of insuring that the shipments were not a health hazard. Although he cannot recall any specific shipment, he advised that there were about 12 shipments a year from the facility. All were "emergency" shipments in the sense that they were usually late in departing and that trucks were standing by which were expensive to hire. Thusly, some shipments were loaded at night as soon as they were prepared. The shipments of cobalt shipped to Israel under a contract to irradiate Israeli crops, were packed in various sized containers, usually oversized for sufficient shielding. Due to poor detection equipment of the time, it was impossible to determine the type of material that was in each container.

I as well as everyone at the NUMEC facility, was aware of the alleged loss of nuclear material there. He participated in searches for the material, especially in the dump site at the plant. Although he has no specific knowledge of the loss, I believes that the losses were the result of
chemical processing of the uranium and that, as he believes, the loss was probably discharged into the river with the waste water. He stated that this is impossible to verify exactly, especially after such an extended period of time.

stated that there were many foreign visitors to the plant to observe the facility in action. However, he can remember no specific individual from these visits, nor any unusual circumstances regarding these visits.

stated that he has had no contact with Shapiro since leaving NUMEC in 1970.
TO: DIRECTOR, FBI (117-2564)
FROM: SAC, WFO (117-273) (P)

Re: Pittsburgh letter dated 9/30/80.

Enclosed for FBIHQ are two copies of an FD-302 reflecting the interview of former NUMEC employee.

Since a lead is currently outstanding at New Haven, this matter will be maintained in an open status pending completion of that investigation.
On January 15, 1981, former Nuclear Materials and Equipment Incorporated (NUFEC) employee, [Redacted], was interviewed at his place of employment, Westinghouse Electric, Nuclear Fuel Division, Bluff Road, Route 48, Columbia, South Carolina. The results of this interview are as follows:
Who resides at South Carolina, and has telephone number was interviewed at his place of employment, Westinghouse Electric Nuclear Fuel Division, Bluff Road, Route 48. was advised that he was being interviewed regarding his past employment by Nuclear Materials and Equipment Incorporated (NUMEC). stated that since January, 1979, he has been employed by Westinghouse as a Fellow Engineer - Radiological and Environmental Engineering Section. He stated that he was employed by NUMEC from approximately August, 1968, until February, 1974, and that from August, 1968, until August, 1970, was the supervisor of Radiation Protection and the NUMEC plant near Karthaus, Pennsylvania. He advised that this was the Atlantic Richfield Company (ARCO), Radiation Process Center. He stated that Dr. Zalman M. Shapiro, the founder of NUMEC, had sold NUMEC to ARCO in approximately 1965, but had been retained by ARCO as president of NUMEC.

stated that he could recall having escorted a shipment of nuclear material from NUMEC to the Port of Newark, New Jersey, during what he believes to have been the winter of 1969 - 1970. He stated that he was unable to recall what month it was, but does remember that the weather was very cold. He said that it was his understanding that this was a larger than usual shipment of Cobalt 60, which was to be shipped to Israel for use as a field irradiator primarily to reduce disease infestation of potato sprouts. He said that the procedure in this particular instance was that the large lead cask was loaded on a flatbed truck and that the cask itself was surrounded by a cage, which he believes was probably a chain link fence type cage. He stated that the purpose of the cage was to prohibit anyone from getting close enough to the cask to be exposed to excessive radiation, and also to meet the Department of Transportation (DOT) requirements. He said that the purpose for this special escort was that the cask containing the radioactive material did not strictly meet the DOT regulations, and that NUMEC was required to get a special permit to transport the cask. He said that his special responsibility was due to his being a radiation specialist. He said that his specific responsibility was to periodically check the amount of radiation being emitted from the cask, and to assure that it did not
exceed specific limits. He said that he had been told that the cask contained Cobalt 60, and that the measurements of the radiation which he made were consistent with the radiation emitted by Cobalt 60.

stated that he rode in an automobile with another NUMEC employee, who was the NUMEC shipping and receiving expert. stated that another NUMEC employee, Marlin Ebert, who was an engineer, also went along as an escort, but did not ride with him. He stated that they followed the flatbed trailer, which was carrying the cask of radioactive material from Karthaus, Pennsylvania, to the Port of Newark, New Jersey, and always had visual contact with the shipment.

He stated that the Pennsylvania State Police escorted them from NUMEC to the New Jersey state line, and then they were escorted to the Port of Newark by officers of the New Jersey State Police.

stated that he cannot recall actually seeing the lead cask lifted onto the Israeli ship that was to take it to Israel, but that he was in the immediate vicinity while that was accomplished.

said that he was aware of media reports of the possibility that other nuclear materials may have been shipped to Israel, and had often considered the possibility that a cask such as this one that he escorted could have, in fact, contained other materials.

He stated that he had no personal knowledge of what was actually contained in this cask, as he did not see the cask being packaged or have access to the actual contents. He said that the only thing that he could say regarding the contents is that the radiation emitted from the cask was consistent with what would be emitted by Cobalt 60.
TO: DIRECTOR, FBI (117-2564)
FROM: SAC, COLUMBIA (117-15) (RUC)
SUBJECT: DIVERT
OA: WFO

Re New Haven airtel with enclosures to Director, dated 1/6/81.

Enclosed for the Bureau are the original and one copy and for WFO two copies of an LHM reflecting the interview of Ion on 1/15/81.

2-Bureau (Enc. 2) (RM)
2-WFO (117-273) (Enc. 2) (RM)
1-Columbia

W RT/cmh (5)

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED
DATE 6/3/82 BY SP-16SK/RE

Approved: 5/23/85 
Transmitted (Number) 
Per 

3/30/81
Enclosed for the Bureau are two corrected copies of an FD 302. Cask was inadvertently spelled cast on the original. Corrected copies are being sent WFO. Columbia copies have been corrected.
The Federal Bureau of Investigation (FBI) has conducted two investigations of Dr. Shapiro. The first investigation was prompted by the Atomic Energy Commission (AEC) advising this Bureau in 1965 that the Nuclear Materials Equipment Corporation (NUMEC), an AEC subcontractor in Apollo, Pennsylvania, was negotiating with the Government of Israel to establish a joint company in Israel to be known as Israeli NUMEC Isotopes and Radiation Enterprises (ISORED), Limited. The firm was to engage in the irradiation of citrus fruit. A Foreign Agents Registration Act investigation was initiated to determine if Shapiro was acting as an agent of the Israeli Government in the United States. During the course of this investigation, Shapiro was interviewed. He claimed his close relationship with the Israeli Government was strictly a business matter.

The results of this investigation were furnished to the Justice Department. In September, 1966, the Justice Department advised that the activities of Shapiro and NUMEC did not fall under the purview of the Foreign Agents Registration Act.

In February, 1966, the AEC advised there were indications that NUMEC was lax in the management of nuclear materials. Since April, 1957, AEC had made extensive internal technical checks at NUMEC and had reported the situation to the Joint Committee on Atomic Energy (JCAE). The Joint Committee was told by AEC on February 14, 1966, that in the absence of evidence or suspicion of a violation of the law, AEC had determined that inquiry by the FBI was not then warranted.
According to AEC, NUMEC received 1,012 kilograms of uranium-235 from AEC to process into fuel elements for nuclear reactors for space propulsion. This subcontract was completed on October 31, 1964. In April, 1965, an AEC inventory indicated a loss, fixed by a later AEC check in November, 1965, at 61 kilograms valued at $764,000. In addition, a survey of the plant's operations since 1957 revealed that NUMEC had experienced a total cumulative loss on all AEC subcontracts of 178 kilograms, all but 61 of which AEC considered properly accounted for by normal processing losses. AEC was unable to say unequivocally that theft or diversion of the 61 kilograms had not taken place, but AEC believed that NUMEC consistently underestimated its processing losses and that the loss of the 61 kilograms charged to the latest subcontract actually reported an accumulation of losses over an 8-year period. AEC pointed out, however, that because the NUMEC records system was not then so set up, no determination could be made as to when the various losses occurred or whether material provided for the latest subcontract was used, knowingly or inadvertently, to offset losses on other contracts.

AEC advised that there would be no financial loss to the Government as NUMEC had agreed to pay for the 61 kilograms. In addition, NUMEC had developed a better system for controlling nuclear materials and an improvement was also expected due to NUMEC's hiring of a former AEC official. AEC advised, however, that prior to making more penetrating checks into NUMEC's operations, it was felt the FBI should be consulted to determine whether the FBI desired to assume investigation of the matter.

The FBI advised AEC on March 1, 1966, that the FBI had given full consideration to this matter and that under the circumstances presented by AEC, the FBI did not intend to assume any investigative responsibility; however, it was requested that AEC advise the FBI of any further developments coming to its attention concerning this matter which would indicate there had been a violation within FBI jurisdiction.
The investigation determined that Shapiro had a very strong personal sympathy for the Israeli cause. His immediate circle of friends included a number of persons known to be active or ardent sympathizers with the Israeli cause. Shapiro was a close personal friend of David Lowenthal, a former Freedom Fighter for Israel, who frequently visited Israel.

(S)

David Lowenthal is the President of Haynord Corporation in Apollo, Pennsylvania. Lowenthal is also an officer of Apollo Industries in Pittsburgh, a company which was instrumental in establishing NUMEC through investment of a substantial amount of money in NUMEC stock. The investigation also determined that Shapiro made a number of visits to Israel where he was treated with consideration that exceeded what his position would normally call for.

Several sources advised that Shapiro felt so strongly for the Israeli cause that he seriously considered emigrating to that country. Shapiro was active in fund raising and bond drives and was a heavy contributor to activities on behalf of Israel in the United States.
SECRET

Dr. Zalman Mordecai Shapiro

In September, 1968, Colonel Avraham Eylonie, a senior official of Israel's Military Intelligence Service, was in the United States and had several meetings with Shapiro in Apollo, Pennsylvania, and Washington, D. C. (S)

AEC subsequently interviewed Shapiro and thereafter, advised that no further action was being taken by AEC. Shapiro resigned his position as President of NUMEC in June, 1970. In January, 1972, Shapiro was employed as the Assistant in Charge of the Breeder Reactor Division, AEC, Westinghouse Electric Corporation, Monroeville, Pennsylvania. He held no security clearance and did not have access to classified materials. By letter dated April 15, 1969, the Department of Justice advised that based on the results of the FBI investigation conducted to date, the facts of the matter were not such as to warrant action against Shapiro.
In April, 1976, the Attorney General orally instructed the FBI to immediately reopen the investigation concerning Shapiro and NUMEC to include not only a reinvestigation of the alleged diversion, but also the possibility that current or former Government officials did not take appropriate action to thoroughly resolve allegations involving Shapiro. To date, numerous interviews have been conducted of former officials of the AEC; NUMEC; former Energy Research and Development Administration, now Department of Energy; and individuals who were associates and acquaintances of Shapiro. To date, there has been no substantive evidence to indicate that a diversion occurred, nor has there been evidence to prove the allegation that Government officials sought to overlook violations of security and accounting procedures that occurred at the NUMEC facility.

During 1978, the following oral briefings have been provided concerning the FBI investigation of NUMEC and Shapiro: 1/5/78 - Senator Inouye's staff; 1/6/78 - Congressman Udall's staff; 5/24/78 - Congressman Udall's staff; 7/14/78 - Chairman and Commissioners of the Nuclear Regulatory Commission; 9/25/78 - Michael Ward and Peter Stockton, Interstate and Foreign Commerce Committee, Subcommittee on Energy and Power; and 10/10/78 - Senator Glenn's staff, Committee on Governmental Affairs, Subcommittee on Energy, Nuclear Proliferation, and Government Services.

During the latter part of 1977, the General Accounting Office (GAO) was provided briefings regarding the FBI's investigation of this matter. All of the foregoing briefings were conducted with the concurrence of the Department of Justice and were coordinated with the Legal Liaison and Congressional Affairs Unit, Legal Counsel Division.
By memorandum to the Director from Assistant Attorney General Philip B. Heymann dated 6/8/79, the DOJ furnished a list of individuals of whom they desire interviews. The Department requested that the Bureau locate and interview these two groups of individuals as to any knowledge they may have concerning the alleged diversion of special nuclear material from the NUMEC plant. Those within the second group should also be asked if they know of, or have heard of, any attempt by anyone in the executive branch to prevent or impede an investigation into this alleged diversion, or to withhold any information regarding this alleged diversion from any investigative body.

By report dated 11/9/79, WFO submitted interviews as requested by the Department of Justice. The report furnished the results of interviews of approximately 50 individuals, as set forth in the request by the Department of Justice. There has been no information presented which supports the alleged diversion of special nuclear material from the NUMEC plant, nor has there been any indication of anyone in the Executive Branch attempting to prevent or impede an investigation into this diversion or withhold any information regarding this alleged diversion from any investigative body. Several individuals remain to be interviewed, and will be as soon as addresses are ascertained for them.