UNITED STATES GOVERNMENT

2-Way Memo

R

335173

INSTRUCTIONS

Use routing symbols whenever possible.

SENDER:
Use brief, informal language.
Conserve space.
Forward original and one copy.

RECEIVER:
Reply below the message, keep one copy, return one copy.

Subject: ATLAS FACILITY VISIT - TROY MASON, STUDENT OF C.C.C.C. FRED HYMES, JR., C.C.C.C. INSTRUCTOR, HELEN PIVODA, CITY OF NLV on NOVEMBER 5, 1981

DATE OF MESSAGE	Routing Symbol
Nov. 5, 1981	

To:
David Miller
Dir., OPA, NV

Good Show, Dee!
File Release Book.
Dave
11/6

SIGNATURE OF ORIGINATOR
DeLora N. Jenkins

TITLE OF ORIGINATOR

FOLD — FOLD

INITIAL MESSAGE

I met Jack Story, EG&G Deputy Manager, and Jerry Burgon, EG&G, at the Atlas Facility at 2:30. We walked through the yard where the trailers are assembled, the tower where instrumentation canisters are assembled, and into the [redacted] pit area. We discussed the interview and where it should be conducted. It was agreed to let the two men film the pit area and then to move them to an office area where Story and I could be interviewed. At 3:30 p.m. Hymes and Mason arrived. Hymes said he had tried to get into the facility when Jackson was director of OPA and Jackson had refused. Hymes was somewhat upset about that. When Helen Pivoda arrived about 3:40, we badged them into the facility after instructing them that the camera should remain down except where we told them they could film. They gave me a list of questions they wanted to discuss.

Hymes began questioning if the DOE was licensed by NRC to have radiation sources in the building. Story said DOE did not have to be licensed by NRC for defense programs ~~but that EG&G was licensed anyway.~~

REPLY MESSAGE

The gist of Hymes and Mason's complaint was that "they were not told about radiation in the building and that the city officials had said there were none." When Greenpeace hung their signs they became alarmed. They asked about devices in the assembly tower but Story told them devices were not in the area, and were never kept at the Atlas Facility.

In the pit they wanted to film the badges and dosimeter pencils. I suggested that the health physicist explain what they were because I did not want [redacted] blank film they could use [redacted] for a voice over. The health physicist took us into the source area and began to explain about how it is used. Mason interrogated him until Story interrupted and proceeded with the interview.

When we went upstairs to the conference room (actually an office because conference rooms could not be used for red-badged persons), Mason asked these questions:

DATE OF REPLY	Routing Symbol

From:

SIGNATURE OF REPLIER

TITLE OF REPLIER

5027-104

1. TO BE RETAINED BY ADDRESSEE

OPTIONAL FORM 27
JULY 1973
GSA FPMR (41 CFR) 101-11.6

Q: Why are dangerous radiation sources kept in a residential area? What would happen to the people if someone broke in and got the source?

Story addressed the issue. He noted that the CO-60 sources were exactly the same as those used in larger hospitals for radiotherapy and no one worries about hospitals.

Q: Why weren't the public and the NLV city officials aware that nuclear materials were in the [redacted] building?

I showed him the news release about the opening of the facility and explained that city & county officials were invited to tour the facility in 1976. I showed him the news clipping from the Sun and told him that ERDA/DOE had had an open information policy with the intention to keep the community and the state aware of any thing that would affect the community or state.

He said he didn't read the newspapers! I told him all the media, including TV reporters were invited.

Q: How are radioactive sources transported in Nevada -- he alluded to Greenpeace signs.

I held up the map of approved transportation routes and explained about the DOT approved regulation on routes. I explained that the city and state officials were consulted about where they wanted these materials to be transported. I read from the Greenpeace news clips the quotes by the two DOT state spokeswomen.

Q: He (Mason) now turned to Helen Pivoda and interrogated her. Why didn't mayor know about nuclear materials? Why wasn't he concerned about the city? Didn't the mayor say, in fact, that there would be no radiation in the building? Why wasn't he concerned about the traffic of these materials?

Pivoda remained calm but was flouddering after a time so I interrupted and brought the interview around to the NV rad response team and the agreement with the state of Nevada to assist in a radiological [redacted] incident on the highways. He seemed surprised and pleased. I explained about the training and awareness of local and state law enforcement officials.

Q: Hymes then again asked why we used "a play on words or word games" in the news release to say there were no nuclear devices but avoiding nuclear materials.

I told him that we did not avoid the fact of nuclear materials and again, showed him the news release and the subsequent news story and reiterated that the media had seen the source area.

Q: MASON turned to Pivoda, asking about nuclear "devices" at Nellis and the transportation of them on the highways.

She floundered a little so I interrupted to say that I thought Nellis was the proper source of information related to USAF matters.

By this time it was 5:30 p.m. and I told them we could give them no more time. Mason wanted to continue but I insisted. Hymes by this time was congenial. I believe he seemed convinced that I was honest and that we weren't trying to cover up anything.

I asked Mason what he planned to do with the tape. He said he hoped to make a 28-minute tape and try to get it on public service TV. (As we expected!) Hymes said he would be happy to show the videotape to the DOE and EG&G when it is edited. Both Story and I said we would like to see it. Hymes agreed to call when it was ready for viewing which should be in "about two weeks." Mason said he would interview a number of other people and especially more city officials.

I learned a lesson that I had been told and should have known. I should have established a length of time for the interview and held to it. We saw them through the guard and signed out at 5:45 p.m.! Later, in privacy, I apologized to Story for not ending it sooner.

Valley Times 10-12-79

Nuke Safety: For NLV EG&G Lab It's First

By ANN KOFOL
Times Staff Writer

A tiny metal shutter is the only thing that stands between the delicate instruments which detect the intensity of radiation and the substance which many consider the Pandora's Box of the 20th Century.

Sealed safely beneath several inches of lead, platinum and stainless steel is an inch-wide orb of cobalt-60, a highly radioactive substance widely used in the field of medicine, but which, for the last three years at EG&G's North Las Vegas testing laboratory, is among the radioactive substances used to calibrate the delicate instruments that analyze the nuclear blasts at the Nevada Test Site.

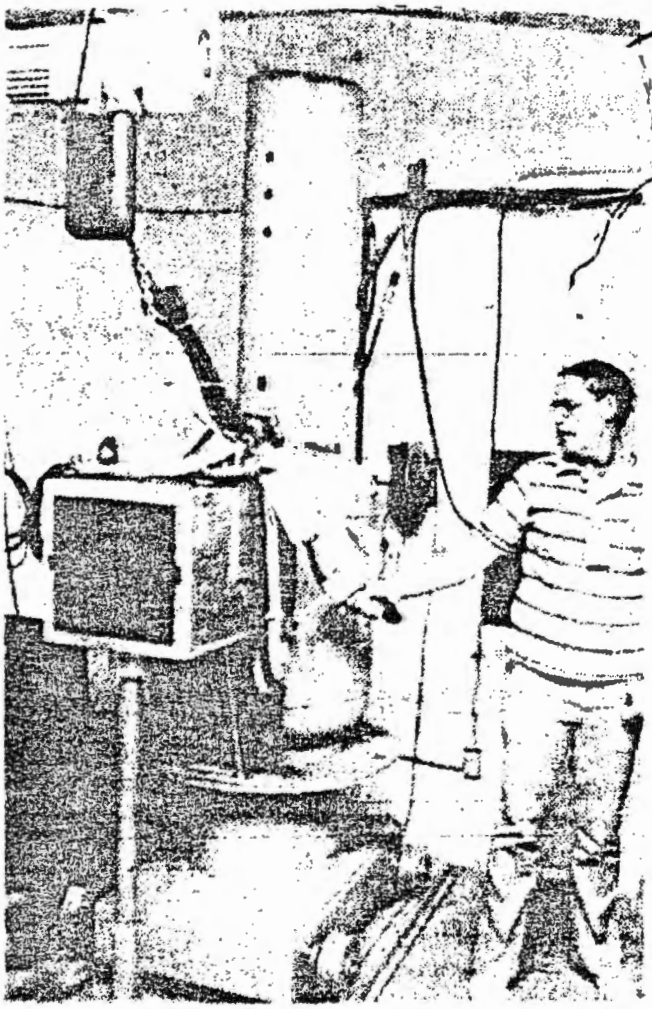
EG&G (Edgerton, Germeshausen & Grier, Inc.) provides the detection equipment used to test the output and performance of the weapons detonated at the NTS, so the equipment, in turn, must be test for accuracy and dependability, according to Jack Story, EG&G Deputy General Manager and safety director.

As director for safety, Story explained the painstaking methods that engineers and physicists apply for the protection of the lab's staff from a radioactive source "that could be dangerous."

The company has been working with small quantities of radioactive metals in its calibration work for the last 20 years, Story said, all without a major incident of exposure.

Radiation detection equipment is installed at the guard house entrance to the plant and placed near

(Please turn to Page A 12)



TAKING MEASUREMENTS — Bill Markland, health physics technician at EG&G, measures minute amounts of radiation from a heavily-shielded cobalt-60 source. The source is located in the barrel-shaped structure at center, which weighs approximately 10,000 pounds. (Times Photo by Gary O'Brien)

Story provided tests - Haynes and Rivada.

How EG&G Handles Radioactive Materials

(Continued from Page A-1)

the underground laboratory to monitor for any possible radioactive leaks. Additionally, safety technicians make special monitoring checks periodically to measure for leakage, he said.

Transportation of the radioactive "sources" to the North Las Vegas site from the government's laboratory at Oak Ridge, Tenn. is carefully conducted and provides adequate public safety, Story said, since the materials come already packaged in both the platinum and stainless steel containers in which they are used.

The calibration of equipment is conducted at the North Las Vegas facility in a laboratory located 15 feet underground and accessible only with the use of a special elevator key. Only about 20 of the 350 workers at EG&G's plant have use of the access key, Story said.

The lab is comprised of three "source range" testing rooms which are equipped with the thick, metal pigs — that contain the radioactive materials — and myriad devices such as heat detectors, emergency alarms, radiation monitoring equipment and thousands of feet of electric wire.

The radioactive substances currently used at the site are cobalt-60 and cesium-137, he said.

The largest chunk of radioactive metal currently used for calibration at the facility "is about ten times the size of the normal (eletherapy unit source used by hospitals," Story said.

Instruments, such as radiation detectors, which later will be lowered into the shafts to record the blasts at NTS — are placed about 18 feet from the pigs, awaiting a directional beam of radioactivity when the source container is opened.

The doors to the source room are electronically interlocked via the control panel, prohibiting human entrance during an experiment, he said.

As the source shutter is opened and rays of nuclear energy are released, one can watch the control panel dials from the safety of the control room.

When the experiment has concluded, the source is

Lyle Sandow. "Bill Markland (another health physicist) has the radiation detector and the keys, so he goes in first and comes out last."

What happens in the event a man is left in the locked room when testing is conducted? Heat detectors signal the source container to shut off radiation exposure and a

PANIC BUTTON — This switch is used to shield the radiation source should it accidentally be exposed while lab personnel are present in the source range room. (Times Photo)

loud alarm rings, he said.

In the event of an electrical failure a manual "scram" button is pushed, which also is designed to close off the radioactive source from the surrounding room.

The type of radioactive substances used at the EG&G laboratory are "non-polluting," according to Story. Unlike liquid or gaseous radioactive isotopes, the metals used by EG&G do not leave lingering traces of radioactivity in the source room.

The 10,000-pound apparatus which contains the nuclear orb is similar to those used in hospitals and dentists' offices for X-rays, Story said, and the radioactive materials are like those used in medicine.

"Just as in a hospital, the radiation is very strong when the shutter is up. But the heat detectors (which pick up body heat and set off the alarm) won't allow anyone in the rooms unless the beam of radioactivity is off," Story said.

The health technicians and electronics experts who man the U.S., perhaps in the world," Story said.

"I was an X-ray technician before I became a health physics technician," Sandow said. "The safety measures are numerous."

The health technician, whose job it is to monitor dosimeters (badges worn to monitor radiation dosiges), and other radiation detection equipment, have been to Canada on the Morning Star operation during which the nuclear-powered Soviet satellite was recovered.

About 30 Nevada technicians also were dispatched to Pennsylvania's Three Mile Island nuclear facility in March to measure the amount of radiation which had escaped from the crippled nuclear power reactor.

"The radiation released at TMI was low, no one was exposed to as much as one gets from a chest X-ray," Story said.

Proud of the safety record of the 30-year-old nuclear energy industry, Story said the Pennsylvania accident "proved that a major accident occurred without the major release of radiation," he said.

Optimistic about the future of the nuclear industry, Story said that private industry is capable of taking the proper precautions to protect the public from radiation exposure.

"Industry can, but it should be monitored by public health offices and safety agencies," he said.

When asked to comment about the controversy surrounding the Beatty nuclear waste dump, Story said he believes the site, itself, is not dangerous.

"The problems are very slight, but if it is a matter of shipping, the shippers should clean up their act. The site, itself, doesn't pose a hazard to the public," he said.

While emphasizing that a nuclear accident is "not possible" at the North Las Vegas lab, Story indicated that Nevada technicians are prepared to "handle" any radioactive emergency.

The experience of their technicians and others involved in the industry in Nevada with the Canadian operation and at TMI have "given us the confidence to be able to deploy our men and equipment in any emergency in Nevada and the U.S.," Story said.

"There is a great deal of hysteria about it," Story concluded, "and concern about the safe use of radioactive sources.

"But we also know that radioactive substances can be handled safely."

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As the source shutter is opened and rays of nuclear energy are released, one can watch the control panel dials from the safety of the control room.

When the experiment has concluded, the source is shuttered, and the source room is once again unlocked to the frailties of the human anatomy, only the warmth of the outer shell of the radioactive unit remains as an indication of the potent material contained within its womb.

"This source is reading about 2 milliroentgens per hour, and that means that if you were to stand here for approximately 25 hours, you would receive the same amount of radiation one receives from an ordinary chest X-ray," Story said.

As the health physicists and test workers enter the unlocked room — shielded from the control room by thick concrete walls and lead plates — hand-held radiation detectors proceed them.

"We operate on a first-man-in, first-man-out system," according to health physicist

PANIC BUTTON — This switch is used to shield the radiation source should it accidentally be exposed while lab personnel are present in the source range room. (Times Photo)

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The health technicians and electronics experts who man the EG&G facility have been dealing with radioactivity for various numbers of years, but when asked about the current criticism of nuclear energy, they responded similarly.

"Some of it is appropriate," Story said, "but a great deal is just hysterics, coming from people who are not knowledgeable about nuclear energy."

"People who work within a radiation environment receive much greater safety measures — it is the safest industry in

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