

1. In the Red Cross Hospital at Hiroshima, located at about 1.6 km from the projected point of the explosion, on the third floor of the building, we found a stock of photographic materials which had been exposed to the radiation from the bomb, but had not otherwise been opened, exposed, or developed. The Japanese technicians told us that all the film they had tried out had been blackened by the ~~hit~~ shot, and was therefore unuseable. They were quite willing to give us these samples.
2. All the samples from Hiroshima were exposed to the bomb in a direct line. No building wall or ~~other~~ structure intervened. The radiation came through the air, a glass window pane of 2 mm thickness ( a sample of which I submit ) and the walls of a wooden storage cabinet. In addition, some of the film was stacked among other photographic materials.

The wooden cabinet had the following wall: ~~2~~ 4mm plywood, 4.2 cm of loose sawdust, and 4 mm plywood.

3. In addition to the exposed film from Hiroshima, we have obtained samples of identical film from dealers in Tokyo. These samples may be used to control the development of the Hiroshima film and to calibrate its emulsion by giving known exposures to the Tokyo samples and comparing the densities on development.

At Site Y, the photographic groups should be consulted. In addition, Dr. William Bayles and others at Rochester and at Eastman Kodak have specialized in photometric dosage measurement.

4. As indicated in writing on the packages, the Hiroshima films are a bit old. This may spoil the results. If this is not too bad, I feel that the four types of film obtained should allow sufficient latitude to secure a decent measurement of the dose, which must have been between ten and one hundred r.

5. Identification of the samples

Each sample is marked with a letter in red pencil.

- A Unexposed 35 mm film intended for photography of fluoroscope screens in indirect chest X-ray work.
- B Identical film, exposed at Hiroshima. The can was standing on a shelf.
- C X-ray film, sensitivity DIN 18/10. Unexposed Tokyo sample.
- D Identical film, exposed at Hiroshima. This package was on top of several other such boxes. See label on end of box. The developer is a normal one, using ~~Ex~~ metol and hydroquinone.
- E These Ilford plates were exposed at Hiroshima. The box was on top of a stack of papers. The box was unsealed, and may have been accidentally fogged by visual light. The bottom plate should be most reliable.
- F Bromide paper bought in Tokyo. High/contrast.
- G Identical paper exposed at Hiroshima. About 2 cm of similar envelopes were above this package in the stack.

All Hiroshima samples were in the horizontal plane.

For Dr. J. R. Oppenheimer

P. Morris  
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 PER DOC REVIEW JAN. 1973

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