= Bernard Waldman =

Bernard Waldman (October 12 , 1913 ? November 1 , 1986) was an American physicist who flew on the Hiroshima atomic bombing mission as a cameraman during World War II .

A graduate of New York University , joined the faculty of the University of Notre Dame in 1938 . During World War II , he served in the United States Navy as an engineering officer . He headed a group that conducted blast measurements for the Trinity nuclear test , and served on Tinian with Project Alberta .

After the war he returned to Notre Dame . He was director of the Midwestern Universities Research Association Laboratory from 1960 to 1964 , dean of its Notre Dame College of Science at Notre Dame from 1967 to 1979 , and associate director of the National Superconducting Cyclotron Laboratory from 1979 to 1983 .

= = Early life and education = =

Bernard Waldman was born in New York City on October 12 , 1913 . He attended New York University , from which he received Bachelor of Science and Doctor of Philosophy degrees . His thesis , on " The Resonance Processes in the Disintegration of Boron by Protons " , formed the basis of a paper published in the Physical Review . His research supported the estimates of J. Robert Oppenheimer and Robert Serber .

Although he was a Congregationalist , Waldman joined the faculty of the University of Notre Dame in 1938 . He became an assistant professor in 1941 .

= = Manhattan Project = =

During World War II , Waldman served in the United States Navy as an engineering officer , and was involved in construction and extension of naval bases in the United States . He took a leave of absence from Notre Dame and joined Oppenheimer and Serber at the Manhattan Project 's Los Alamos Laboratory in 1943 . He was assigned to Norman F. Ramsey 's E @-@ 7 Group , which was part of the Ordnance (O) Division responsible for " integration of design and delivery " . Most of the work involved preparing and checking instrumentation from drop tests involving dummy bombs .

Waldman was the head of Group TR @-@ 6 (Airborne Measurements) for the Trinity nuclear test in July 1945 . He developed microphones that were dropped by parachute to measure the effect of the blast . He was then assigned to Project Alberta , the part of the Manhattan Project that oversaw the preparation of facilities to test and deploy nuclear weapons , and support their use during the actual missions . As such , he participated in the atomic bombing of Hiroshima , as a camera operator on the observation aircraft . He was equipped with a special high @-@ speed Fastax movie camera with six seconds of film in order to record the blast . Unfortunately , Waldman forgot to open the camera shutter , and no film was exposed .

= = Later life = =

After the war ended , Waldman returned to Notre Dame , where he continued his research into the photodisintegration of deuterium and beryllium . For a time he was in charge of a 3 @-@ million volt particle accelerator that was the world`s second most powerful source of X @-@ rays in 1949 . In 1960 , Waldman took a sabbatical from Notre Dame to become director of the Midwestern Universities Research Association (MURP) Laboratory . He set about fixing problems with the 50 MeV accelerator . These were resolved , but the Federal Government declined to fund MURP 's activities , and Walden returned to Notre Dame in 1964 . Waldman was appointed dean of Notre Dame 's College of Science in 1967 . He held this position August , 1979 , when he retired at the age of 65 . He then became as associate director of the National Superconducting Cyclotron Laboratory at Michigan State University , a position he held until 1983 .

Waldman died in a hospital in Sanford , North Carolina , where he was being treated for cancer , on

November 1 , 1986 . He was survived by his wife , Glenna and three daughters . A funeral service was held at the Basilica of the Sacred Heart on the campus of the University of Notre Dame , and he was interred in its Cedar Grove Cemetery . His papers are in the University of Notre Dame Archives .