

# Army saw LSD as tool, researcher says

By DAVID ZIELENZIGER

A physician who directed the earliest testing of LSD by the Army at Edgewood Arsenal in the 1950's said yesterday the military was "interested in all it could find out about LSD," including its use as a weapon by saboteurs in combat.

Amedeo S. Marrazzi, 70, now affiliated with the Detroit Psychiatric Institute, was reached yesterday at his home in Grosse Point, Mich. He said the Army looked at LSD "as a tool to find out more about how the nervous system works and to improve therapy related to the transmittal of substances in the nervous system."

Dr. Marrazzi, who was chief of the clinical research division at the Army Chemical Center from 1951 to 1956, said that the experiments performed with hallucinogens during his tenure were performed only on cats and other laboratory animals.

But he said the testing of the drugs on humans "was a theoretical extension of our work."

"I think all of us contemplated what the advantages and disadvantages might be [of LSD in combat]," Dr. Marrazzi continued, "and as you know it was used for therapy. We wanted to analyze as many things as pos-

sible, to more or less get a rational basis for it."

Testing of the LSD and other hallucinogens, including adrenergic and cholinergic chemicals, mescaline, and marijuana derivatives, on about 1,500 soldier and civilian volunteers, began in 1956 and lasted until 1967.

Cholinergic substances excite impulses through the body's nerve junctions; adrenergic ones inhibit them.

These tests were conducted under contracts with the medi-

cal schools of the University of Maryland, the New York Psychiatric Institute, the University of Wisconsin, and the University of Washington.

The Army LSD tests came to light in the aftermath of the Rockefeller Commission's report on the CIA, which disclosed the 1953 suicide of Dr. Frank R. Olson, a civilian researcher from Frederick, who unknowingly was given LSD.

Dr. Marrazzi said the LSD was "readily available" since it was provided by Sandoz Re-

search Laboratories of Switzerland, which was the only source of the drug into the 1960's.

Col. Joseph R. Blair, who was director of medical research at Edgewood from 1963 until 1974, confirmed the physician's statement yesterday and added:

"The LSD supplies were on hand when I came to Edgewood. The substance, you know, is like a little table salt. It lasts forever. The use of it here was discontinued in 1966 or '67, and

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what happened to any of it at that time, I don't know."

Tests of the drug, under medical rules, could be administered only under medical supervision. Many of the Army scientists involved in research at the laboratories were physical chemists, who would not have been allowed to administer any drug.

Dr. Marrazzi said his LSD research on animals showed the substance "turned out to have predictive action, such as serotonin, in fact."

Serotonin, a chemical related to, but six to eight times more powerful than LSD, produced hallucinations and other disorders in the animals, he said.

Scientists were seeking to study LSD and other cholinergic drugs for the treatment of mental illness at the time, Dr. Marrazzi continued, but the Army was also concerned about effects as they related to nerve gases, which excite impulses through nerve junctions in the body.

"Sure the Army was interested in that," Dr. Marrazzi said. "That's what nerve gas is."

But he declined to comment on why the Army made the jump from experimenting with the gases to conducting tests of LSD.

An Army spokesman in Washington would not comment on the LSD research or its purposes beyond saying that a search of service and medical records was continuing and information relating to the tests remains classified.