LSD as tool, researcher says

A physician who directed the tional basis for it." earliest testing of LSD by the Army at Edgewood Arsenal in the 1950's said yesterday the military was "interested in all cals, mescaline, and marijuana 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 t the Army Chemical Center from 1951 to 1956 said that the experiments performed with allucinogens during his tenure vere 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-

Testing of the LSD and other hallucinogens, including adrenergic and cholinergic chemi-sity of Washington. derivatives, on about 1,500 sol-dier and civilian volunteers, began in 1956 and lasted until 1967

chiatric Institute, the Universi- of the drug into the 1960's. ty of Wisconsin, and the Univer-

The Army LSD tests came to port on the CIA, which disclosed the 1953 suicide of Dr.

under contracts with the medi- was provided by Sandoz Re-

sible, to more or less get a ra-tional basis for it."

Auryland, the New York Psyland, which was the only source

Col. Joseph R. Blair, who was director of medical research at Edgewood from 1963 light in the aftermath of the until 1974, confirmed the physi-Rockefeller Commission's re- cian's statement yesterday and added: "The LSD supplies were on

Cholinergic substances ex-Frank R. Olson, a civilian re-hand when I came to Edgecite impulses through the searcher from Frederick, who wood The substance, you know, body's nerve junctions; adre-unknowingly was given ESD: is like a little table salt. It lasts body's nerve junctions; adre-unknowingly was given ESD. is like a little fable salt. It lasts nergic ones inhibit them.

Dr. Marrazzi said the LSD forever. The use of it here was These tests were conducted was "readily available" since it discontinued in 1966 or '67, and See LSD, A4, Cel. 7

the man of he property on Browners' and

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 su-pervision. Many of the Army scientists involved in research at the laboratories were physical chemists, who would not have been allowed to adminis-

ter any drug.
Dr. Marrazzi said his LSD research on animals showed the substance "turned out to have predictive action, such as sero-

tonin, 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

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

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.