## Several Hallucinogens Tested by Army

By Bill Richards Washington Post Staff Writer

The Army experimented, with several powerful types of hallucinogenic drugs on servicemen in addition to LSD during tests that may have lasted as late as 1973, according to researchers who handled the drugs at Edgewood Arsenal.

A senior civilian researcher at the Maryland facility, who asked not to be named, confirmed yesterday that other longer-lasting hallucinogens in addition to LSD were tested on U.S. troops at Edgewood and other military bases.

He declined to say when the tests were halted, but a second researcher at the base said they were stopped after government inquiries about drug testing on humans by the Defense Department in 1973.

The Army disclosed Fri-

day that it used nearly 1,500 servicemen and civilians in LSD experiments between 1956 and 1967. It now plans to give all of them physical and mental examinations to determine whether the testing caused any harmful aftereffects.

An Army spokesman said yesterday that the LSD experiments were ended in 1967. But he said he had no information on whether there were experiments with other hallucinogens and did not know how long such tests could have lasted if they did take place.

The Army's announcement of its follow-up examinations of servicemen and civilians involved in LSD tests made no mention of any other types of hallucinogens.

Dr. Gerald Klee, a Baltimore psychiatrist who was involved in the experimental hallucinogen testing program at Edgewood between 1956 and 1959, said he knew of one serviceman who required psychiatric hospitalization for two weeks in 1960 after being exposed to a type of hallucinogen known as an anticholinergic.

Other drug experts said yesterday it would be difficult for an outsider to identify which type of anticholinergics may have been used at Edgewood since researchers have synthesized dozens of varieties of the drug.

Uses of the drug range from a hallucinogenic with potency for a day or more to a nerve gas antidote to a nonhallucinogenic antispasmodic drug used for stomach cramps and available on the open market, the experts said.

The senior Edgewood researcher said reports on experiments involving anticholinergics and other drugs used on U.S. troops were being prepared by Army officials at Edgewood and would be sent on to the Pentagon.

"It takes time to get all the facts into the Army's hands," he said. "Eventually it will all come out through official channels."

Testing of the anticholinergics on humans at Edgewood was halted, according to a second researcher at the base, after inquiries were made to the Defense Department in 1973 by a federal commission studying biomedical and behavioral research.

The researcher said the type of anticholinergic used at the base caused confusion in the servicemen who were given the drug that lasted for several days in some cases. "The program involved military vol-

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unteers," said the researcher. "They brought about 30 or so in every two months for new tests until they stopped in 1973."

Lawrence Horowitz, a former official of the National Commission for Protection of Human Subjects of Biomedical and Behavioral Research, said yesterday that while the commission did not have jurisdiction over the Defense Department's tests he understood that several experimental projects were halted after his group made inquiries to the Pentagon.

The senior Edgewood researcher said that he knew of no deaths resulting from any hallucinogen testing experiment at the base. "No one has ever been made severely ill," the researcher said, "and there has been no long-term damage."

The Army said Friday that LSD was tested on military volunteers at bases in Maryland, North Carolina, Georgia, Alabama and Utah. Testing was also done on civilian volunteers in Armysponsored studies at the University of Maryland medical school, New York Psychiatric Institute, University of Washington medical school and Tulane University department of neurology and psychiatry.

LSD was manufactured

LSD was manufactured in the 1950s and early 1960s by only one company, Sandoz Research Laboratories of Switzerland. Craig D. Burrell, a spokesman for the company, said last week that the drug was distributed only to "legitimate investigators." These, said Burrell, were state hospitals, university psychiatry departments and the Veterans Administration.

The National Institute of Mental Health conducted both in-house and contract experiments involving LSD. Officials of the agency said yesterday that 50 to 100 persons received the drug during experiments conducted at NIMH facilities in Bethesda. The agency also granted \$7.5 million to fund 84 résearch projects involving humans and animals between 1953 and 1966.

The drug did not become popular in the youth drug culture until the mid-1960s but CIA and military researchers who conducted LSD experiments a decade earlier said there was a fascination with hallucinogens for use as a nonlethal weapon.

Robert Lashbrook, a CIA chemist who worked on LSD experiments at the time, said the intelligence agency feared the drug would be given to U.S. diplomats abroad and at the same time was eager to know what it would do if it could be given to foreign diplomats.

Lashbrook said the CIA's research with the drug continued into the early 1960s but he did not say how many experiments were involved or where they took place. One scientist, Dr. Frank Olson of Frederick, Md., committed suicide in

1953 after being given LSD by a group of CIA employees.

An Air Force spokesman said yesterday that he could find no research by the Air Force with LSD or other hallucinogens. A spokesman for the Navy said the Navy's medical branch did not conduct hallucinogen research but that no information was available yesterday on whether any other Navy branch may have tested the drugs.