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WASHINGTON, D. C. 20301

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MEMORANDUM FOR THE SECRETARY OF DEFENSE

SUBJECT: Experimentation Programs Conducted by the Department of Defense That Had CIA Sponsorship or Participation and That Involved the Administration to Human Subjects of Drugs Intended for Mind-control or Behavior-modification Purposes

On August 8, 1977 you requested that the Office of General Counsel coordinate a search of Department of Defense records to determine the extent of Department of Defense participation in three projects identified by the Director of Central Intelligence on August 3, 1977 as including the administration of drugs to human subjects for mind-control or behavior-modification purposes. In addition, you requested that the search attempt to identify any other project conducted or participated in by the Department of Defense in which there was any Central Intelligence Agency involvement and which included the administration of drugs to human subjects for mind-control or behavior-modification purposes. That search was conducted during the period August 15, 1977 through September 15, 1977 and covered the records of the Military Departments from 1950 to the present.

The results of the search indicate that there were three such programs in which the Army participated over the period 1969 to 1973; five such programs in which the Navy participated over the period 1947 to 1973; and no such programs in which the Air Force participated. In four of these eight programs the Department of Defense participation was limited to channeling funds to outside contractors in order that the sponsorship of the Central Intelligence Agency be covered. In two of the remaining four programs there was no testing on human subjects. Four of the programs were terminated in the 1950's or early 1960's and the remainder were terminated in 1973.

It appears from the documents that the three codeword projects of the Central Intelligence Agency identified by the Director in his testimony as basically Department of Defense projects were, in fact, planned, directed and controlled by the Central Intelligence Agency. Each of these projects and the participation of the military services is described below.

I. Codeword Projects Identified by the Central Intelligence Agency

In testimony on August 3, 1977, before a joint session of the Senate Select Committee on Intelligence and the Senate Subcommittee on Health and Scientific Research, the Director of Central Intelligence reported that the Central Intelligence Agency had located a number of boxes of documents, consisting largely of financial records, relating to experiments using human subjects in which drugs were tested for mind-control and behavior-modification purposes. The Director testified that it appeared that three of the projects described by these documents -- projects designated MKSEARCH, MKOFTEN and MKCHICKWIT -- were Department of Defense programs with which the Central Intelligence Agency had had some contact. The Director also described three other projects -- designated MKULTRA, MKDELTA and MKNAOMI -- which were primarily Central Intelligence Agency projects but which might have had some Department of Defense involvement.

It appears from the available documents that these projects cover subject matters as follows:

MKDELTA: This was apparently the first project established by CIA in October, 1952, for the use of biochemicals in clandestine operations. It may never have been implemented operationally.

MKULTRA: This was a successor project to MKDELTA established in April, 1953, and terminating some time in the late 1960's, probably after 1966. This program considered various means of controlling human behavior. Drugs were only one aspect of this activity.

MKNAOMI: This project began in the 1950's and was terminated, at least with respect to biological projects, in 1969. This may have been a successor

project to MKDELTA. Its purpose was to stockpile severely incapacitating and lethal materials, and to develop gadgetry for the dissemination of these materials.

**MKSEARCH:** This was apparently a successor project to MKULTRA, which began in 1965 and was terminated in 1973. The objective of the project was to develop a capability to manipulate human behavior in a predictable manner through the use of drugs.

**MKCHICKWIT or CHICKWIT:** This was apparently a part of the MKSEARCH program. Its objective was to identify new drug developments in Europe and Asia and to obtain information and samples.

**MKOFTEN or OFTEN:** This was also apparently a part of the MKSEARCH project. Its objective was to test the behavioral and toxicological effects of certain drugs on animals and humans.

Beginning on August 4, 1977, Army and Navy investigators undertook a search of the boxes of Central Intelligence Agency records identified by the CIA code words OFTEN and CHICKWIT in order to locate documents relevant to possible Department of Defense involvement in these projects. On September 7, 1977, the Agency permitted DoD representatives to search additional boxes containing MKULTRA records. Both sets of materials consisted of approvals of advances of funds, vouchers and accounting records relating to these projects.

## II. Army Programs

It appears from the available documents that the Army was involved in one aspect of the Central Intelligence Agency project designated as MKCHICKWIT and two aspects of a counterpart project designated as MKOFTEN. The document search is described in section A below, and each of the Army programs is described in section B below.

### A. Records searched

The search of Army records was coordinated by the Director of the Staff. The search included the files of the Edgewood

Arsenal Research Laboratories, the Dugway Proving Grounds, the Department of Defense Investigative Service (with respect to the Special Operations Division at Fort Detrick), the Department of the Army Inspector General, the Army activity in the U.S. Biological Warfare Program, and the Army Intelligence Agency.

B. Programs identified

(1) Identification of new drugs with behavioral effects


This project began in 1967 and was terminated in 1973. It was carried out primarily by a contractor in California. The project was apparently funded jointly by the Army, through Edgewood Arsenal Research Laboratories, and the Central Intelligence Agency. The funds contributed by the Agency were used by Edgewood for payments to a private contractor. This project was a part of the project designated as MKCHICKWIT.

This project was involved solely with the collection of information. No testing on human subjects was conducted. The Central Intelligence Agency apparently provided \$12,084 in 1967 and \$5,000 in 1969 for this project. The extent of the Army's financial contribution to this project is unknown.

(2) Data bases on evaluation of pharmacological products

This project apparently began in 1968 and was completed by 1971. It was carried out by the Edgewood Arsenal Research Laboratories. The Central Intelligence Agency transferred funds to the Army for this purpose in 1968, 1970 and 1971. This project was a part of the project designated as MKOFTEN.

Edgewood created data bases for computer use with respect to information on pharmacological products. These included human clinical data obtained from volunteer subjects in other Edgewood projects, not connected with the Central Intelligence Agency. (b)(3)-50 USC §403(g) Section 6



(b)(3) 50 USC §403(g) Section 6

This project involved only the transfer of information to computer usable form. No testing on human subjects was conducted. The amount of funding is not known.

(3) Determination of clinical effects of a glycolate class chemical

This project began in 1971 and was terminated in 1973. It was carried out by the Edgewood Arsenal Research Laboratories and was funded by the Central Intelligence Agency. This project was a part of the project designated as MKOFTEN.

It appears from the available documents that Edgewood had been testing a number of incapacitating agents in its own programs without Central Intelligence Agency participation. Edgewood identified a compound designated as EA#3167 as particularly effective and tested it on animals. Edgewood also engaged in clinical testing on human volunteers at the Holmesburg State Prison in Philadelphia, Pennsylvania, using prisoners as test subjects and at the Edgewood laboratories using military personnel as test subjects. It appears that all of the test subjects were volunteers and that stringent medical safeguards and followup procedures were used.

In 1971, the Central Intelligence Agency reviewed prior Edgewood work and identified EA#3167 as relevant to the MKOFTEN program. The Agency set up a joint effort with Edgewood to pursue further testing of this compound. In 1971, the Agency transferred to Edgewood \$37,000 for this purpose. Most of the testing under CIA sponsorship was with animals. The primary effort was to determine whether EA#3167 could be used effectively if applied to the skin through some type of adhesive tape. There was only one experiment that involved human subjects. In June, 1973, two military volunteers were apparently tested using EA#3167. The documents do not give any details with respect to these tests.

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\*/ The Navy contributed a similar data base to the MKOFTEN project but it appears from the available documents that the work to create the data base was undertaken as an independent Navy project not designed for any CIA use, and that there was no transfer of CIA funds to the Navy for this purpose.

### C. Documents released

The Army has identified nine documents related to the programs described in Section B. A list identifying those documents is set out in Appendix A.

### III. Navy Programs

It appears from the available documents that the Navy was not involved in any aspect of the Central Intelligence Agency projects designated MKSEARCH and MKCHICKWIT. It appears that the Navy did act as a financial intermediary through which the Central Intelligence Agency dealt with an outside contractor that conducted one research effort that was a part of the MKOFTEN project. It also appears that the Navy conducted, directly or through contractors, five programs in which there was Central Intelligence Agency sponsorship or participation and which included the administration of drugs to human subjects for mind-control or behavior-modification purposes. The records that were searched are described in section A below. Each of the projects discovered is described in section B below.

#### A. Records Searched

The Special Assistant to the Secretary of the Navy coordinated the search of Navy records. The search covered archival material with respect to the activities of the Office of Naval Intelligence, Bureau of Medicine and Surgery, and the Office of Naval Research.

#### B. Programs identified

##### (1) Synthesis of analogs of certain central nervous system stimulants

This project began in 1971 and was terminated in January, 1973. It was performed by a contractor located in Massachusetts. The involvement of the Navy was only as a conduit for funds between the contractor and the Central Intelligence Agency. Some of the funding documents identify this project as a part of project OFTEN.

In December, 1970, the contractor contacted the Central Intelligence Agency project officer directly and suggested research work on two types of drugs: analogs of DOPA and dopamine and analogs of picrotoxin. After the work was undertaken, the contractor added a third aspect, the study of



analog of the hallucinogen ibogaine. In March, 1972, the contractor suggested enlarging the scope of the work to include narcotic antagonists or blocking agents. One document indicates that "The overall objective of these studies is to synthesize new classes of pharmacologically active drugs affecting the central nervous system so as to evaluate their modification of man's behavior." (Doc. No. CIA-1.) The purpose of creating analogs, rather than using the parent compounds, was to find drugs "which will be more specific in action as well as more reliable." (Doc. No. CIA-2.)

The Central Intelligence Agency may have transmitted as much as \$117,938 for this project to the Office of Naval Research during the period February 26, 1971 through June 23, 1972. The Central Intelligence Agency authorization document stated: "This project is funded through the Office of Naval Research. This arrangement protects the Agency's association with this area of research and provides the contractor with credible sponsorship. The work will be unclassified, but Agency association will be confidential." (Doc. No. CIA-1, 3.)

There is no indication in the documents available to the Navy that human testing was performed by the researchers. One of the documents reports: "The relative merits of the synthetic compounds will be determined in mice, and information as to the underlying biochemical basis for the observed pharmacological activities will be deduced from the comparative effects of the various compounds." (Doc. No. CIA-8.)

One of the researcher's progress reports indicates an intention to publish the results of the first phase of this work, on analogs of DOPA and dopamine, at a professional meeting in the fall of 1972 but there is no indication that publication was accomplished. (Doc. No. N-2.)

(2) Identification of nonaddictive substitute for codeine

This project began in 1954 and was continued at least until 1964. It was performed at the facilities of another government agency located in Kentucky. The involvement of the Navy was only as a conduit for funds between the Central Intelligence Agency and a researcher who was associated with a federal government agency. One of the funding documents identifies this as part of project MKPILOT.

According to the information available to the Navy, the purpose of the project was to find a nonaddictive substitute for codeine. The work was done at the Addictive Research Center, U.S. Public Health Service Hospital, in Lexington, Kentucky. It is unclear from the information available to the Navy whether the researcher was an independent scientist using government facilities or a government employee.

It appears that the researcher tested some 800 compounds on addicted patients. There is no indication in the documents as to the number of persons involved or the compounds tested. Three compounds were retained and all are now common drugs: darvon which is used as a pain killer; dextromethorphan which is used in cough syrup; and lomotil which is used as an antidiarrhea drug.

The Central Intelligence Agency transferred at least \$282,215 to the Office of Naval Research for this program with instructions to make the funds available to the researcher at the U.S. Public Health Service Hospital. The project costs appear to have been between \$34,000 and \$45,000 per year. These documents specify that "the interest of CIA in this project is classified Secret and is not to be revealed ... ." (e.g., Doc. No. N-18.)

(3) Identification of effects of blast concussion

This project began in October, 1954 and was terminated, at least with respect to the Navy, in December, 1955. It was performed by a contractor located in California. The involvement of the Navy was primarily as a conduit of funds from the Central Intelligence Agency to the contractor. A small amount of Navy funds may also have been used for this contract. In December, 1955 this project was terminated as far as the Navy involvement was concerned and it thereafter apparently became subproject 54 of the MKULTRA project.

While the Navy was involved with this project it did not include any drug testing and apparently did not include any testing on humans. The contractor was investigating a new theory of the dynamics of brain concussion. Fluid-filled flasks were used to measure the effect of blast impacts from a 2 1/2 lb. charge of dynamite 10 feet away. The results of this work were published in 1957 in a 17-page report entitled "On the Impact Thresholds of Brain Concussion." (Doc. N-19.)



The Central Intelligence Agency transferred \$20,000 to the Office of Naval Research for use on this project. The Office of Naval Research may have contributed as much as \$5,000 of its own funds to this project.

In December, 1955, the contractor submitted a proposal for a continuation of the research for 1956. In that proposal the contractor pointed out that brain concussion "is always followed by amnesia for the actual moment of the accident" and suggested that "if a technique were devised to induce brain concussion without giving either advance warning or causing external physical trauma, the person upon recovery would be unable to recall what had happened to him. Under these conditions the same technique of producing the concussion could be re-used many times without disclosure of its nature." (Doc. No. CIA-4.) In discussing the techniques envisioned, the contractor described non-drug means for inducing concussion, but went on to describe a technique for providing immunity to concussion that "involves the introduction of a small quantity of gas, approximately 1 cc, into the spinal cord." (Doc. No. CIA-4.)

When this project proposal was received, CIA decided to convert it to the MKULTRA project rather than using the Navy as a conduit for funds. A memorandum dated January 10, 1956 explained:

The first year's work on this program was financed through the Navy for several reasons ...

When [the contractor] was cleared and informed of our true interests in this research, the whole scope of the project changed, and it became apparent that developments might be expected in the second year which would make it impossible to operate the program securely under the previous cover. Specifically, human experiments of a type not easily justifiable on medical-therapeutic grounds would be involved. ...

For the reasons given above and because this project in a general way will begin to become involved in the subjects of interrogation and some aspects of brain-washing,

TSS/CD has decided that it should be funded through project MKULTRA rather than by less secure methods.

(Doc. No. CIA-5.) The project thereafter became subproject 54 of the MKULTRA project and there is no indication of further involvement by the Navy.

(4) Administration of LSD to human subjects

This project began in 1952 and was apparently completed by 1956. It was performed by a researcher located in New York. Navy is listed as a sponsor in only one CIA document prepared at a later date, and not otherwise corroborated. If Navy was involved, it was solely as a conduit for funds between the Central Intelligence Agency and the researcher. This project has been identified as subprojects 7, 27 and 40 of the MKULTRA project.

(5) Development and administration of speech-inducing drugs

This project apparently began in 1947 and ended in 1953. It was performed primarily by a contractor located in New York and, in one aspect, by the Navy at a location in Europe. The involvement of the Central Intelligence Agency was apparently only as an interested observer. The project was funded by the Navy through the Naval Medical Research Institute. The Central Intelligence Agency records of this project are apparently in the BLUEBIRD and ARTICHOKE project files.

The Navy arranged in 1950 to obtain marijuana and heroin from the FBI for use in experiments and entered a contract with a researcher in New York to develop drugs and instrumentation for use in interrogation of prisoners of war, defectors and similar persons. The security cover for the project was a study of motion sickness. The study began with six of the researcher's staff as knowing volunteers. The project was expanded to cover barbituates and benzedrine. Other substances were evaluated.

In August, 1952 the Office of Naval Intelligence informed the Central Intelligence Agency that it had developed drugs that might have the desired characteristics and was about to test them on human subjects who would be unaware of the test. The drugs were administered to about eight subjects, each of whom was a Soviet defector, and each test was done in Europe

in September, 1952. The tests were apparently not satisfactory because the drugs used had such a bitter taste that it was not possible to keep the human subjects from knowing about the test.

By September, 1952 it was apparent that this project was not producing useful results and the Navy began to consider ending it. By 1953 most work had apparently been phased out.

#### C. Documents released

The Navy has identified 42 documents which are related to the programs described in section B. A list identifying those documents is set out in Appendix B.

#### IV. Air Force Programs

It appears from the available documents that the Air Force was not involved in any aspect of the Central Intelligence Agency projects designated MKSEARCH, MKOFTEN and MKCHICKWIT. It also appears that the Air Force was not involved in any program in which there was Central Intelligence Agency sponsorship or participation and which included the administration of drugs to human subjects for mind-control or behavior-modification purposes.

##### A. Records searched

The search was conducted by the Office of the Assistant Secretary of the Air Force for Research, Development and Logistics. The Air Staff offices in which records were searched are: The Surgeon General, the Deputy Chief of Staff for Research and Development, the Air Force Office of Special Investigations, and the Air Force Intelligence Service.

##### B. Programs identified

There were no records or information found relating to projects designated MKSEARCH, MKOFTEN or MKCHICKWIT or corresponding to the description of the subject matter of those projects available through Central Intelligence Agency files.

There were no documents or information found indicating any CIA involvement in any experimentation program conducted by the Air Force that included administration of drugs to human subjects.

C. Documents released

None.

VI. Current Programs

There are no programs currently maintained by any Department of Defense component or contractor involving drug testing on human subjects in which the Central Intelligence Agency is in any way involved.

All current Department of Defense programs involving the use of investigational drugs on humans, including its contractor programs, have been approved by the Food and Drug Administration.

*Deanne P. Siemer*

Appendix A

Army Documents

1. Annual Report in conjunction with Army contract, D A-18-035-AMC-126-(A) to Medical Research Laboratory, Edgewood Arsenal Maryland, 21010 from Duhring Laboratories, University of Pennsylvania, dated March 31, 1966.
2. Letter, Subject: Proposed R&D Study by Edgewood Arsenal (RD 71-535) to Commanding General, U.S. Army Materiel Command from Deputy Chief of Staff for Logistics, Department of the Army, dated 19 March 1971.
3. Distribution Program/Funding Fiscal Year 1971: Edgewood Arsenal, Maryland 21010, dated 1 October 1971.
4. Procurement Work Directive to Commanding Officer, Edgewood Arsenal, Maryland, 21010, from Commanding General, U.S. Army Munitions Command, Dover, New Jersey, 07801, dated 8 October 1971
5. First Quarter, FY 72, Activity Management Report to Deputy Chief of Staff for Logistics, Department of the Army, from Headquarters, Edgewood Arsenal, Maryland, 21010, dated 17 December 1971.
6. Memorandum to Deputy Chief of Staff for Logistics, Department of the Army, from (b)(3) 50 USC §403(g) Chief Supply Division, CIA; dated 21 June 1972, Subject: Extension of Contract date.
7. Memorandum to Deputy Chief of Staff for Logistics, Department of the Army from (b)(3) 50 USC §403(g) Chief of Supply Division, CIA; dated 10 November 1972, Subject: Extension of contract date.
8. Miscellaneous documents, dated from 1974 through 1975 pertaining to the funding and testing of a radio active glycolate in animals.
9. Note from Colonel McClure, Director of Biomedical, Edgewood Arsenal Maryland to Mr. Ed Owens, Biomedical Laboratory, Edgewood Arsenal, Maryland dated August 1975, Subject: Agent 3167.

Appendix B

Navy Documents

1. June 16, 1972, letter from Sheehan Institute for Research, Inc. to ONR.
2. June 15, 1972, letter to ONR.
3. February 17, 1972, ONR Procurement Request and Approval.
4. February 17, 1972, ONR DD Form 1498.
5. March 16, 1972 ONR Requisition and Invoice/Shipping Document.
6. March 10, 1972, letter from Sheehan Institute to ONR.
7. March 12, 1971, ONR Procurement Request and Approval.
8. March 12, 1971, ONR DD Form 1498.
9. March 12, 1971, ONR Military Relevance Statement.
10. March 1, 1971, ONR Request and Invoice/Shipping Document.
11. Undated CIA memorandum to ONR.
12. July 19, 1961 CIA memorandum to ONR.
13. November 7, 1960 CIA memorandum to ONR.
14. October 4, 1960 CIA memorandum to ONR.
15. September 15, 1959 CIA memorandum to ONR.
16. July 18, 1958 CIA memorandum to ONR.
17. August 16, 1957 CIA memorandum to ONR.
18. Undated CIA memorandum to ONR.
19. May 15, 1957, Gross Research Laboratories, Inc., Report N2-R1, On the Impact Thresholds of Brain Concussion.
20. November 2, 1954, CIA memorandum to ONR.
21. October 25, 1954, ONR Procurement Justification.



22. Undated and unsigned memorandum for the Secretary of Defense on Project CHATTER.
23. February 9, 1951, National Naval Medical Center receipt form.
24. February 9, 1951, National Naval Medical Center receipt form.
25. February 9, 1951, Naval Medical Center receipt.
26. February 9, 1951, Naval Medical Research Institute memorandum on Procurement of Certain Drugs.
27. February 15, 1951, Receipt signed by the Director of Naval Intelligence.
28. February 15, 1951, Receipt signed by the Director of Naval Intelligence.
29. May 10, 1951, University of Rochester Studies on Motion Sickness, Vestibular Function and Effects of Drugs.
30. July 24, 1951, Bureau of Narcotics receipt.
31. July 26, 1951, Bureau of Narcotics receipt.
32. September 26, 1951, Bureau of Narcotics receipt.
33. October 2, 1951, Bureau of Narcotics receipt.
34. Undated memorandum from ONI to CIA.
35. October 27, 1951, University of Rochester Interim Report.
36. February 4, 1952, Bureau of Narcotics receipt.
37. May 1, 1952, Report of Special Project relating to the University of Rochester studies, unsigned.
38. September 30, 1952, Navy memorandum for file on Rochester contract.
39. October 28, 1952, Naval Medical Research Institute memorandum.
40. February 26, 1953, Naval Medical Research Institute memorandum re RDB Scientific Report.

41. May 16, 1951, Bureau of Narcotics receipt.
42. Undated ONR memorandum.

CIA Documents

1. August 31, 1972, memorandum for Deputy Director of Science and Technology.
2. December 29, 1970, CIA Card File on Organic Material Synthesis.
3. March 8, 1972, memorandum to the Director of Research and Development.
4. December 16, 1955, request for support of research.
5. January 10, 1956, memorandum for the record, subject, Conversion of Project [REDACTED] from ONR cover to MKULTRA.