UNCLASSIFIED

DISPOSITION FORM

SECURITY CLASSIFICATION (If any)
RCC2.950223.011
[redacted]

FILE NO.
CMLRD-CM-M(C?)

SUBJECT
(U) (Trip Report, Tulane University, New Orleans Louisiana, 17 - 20 Sep 56

TO
Ch, Clin Res Div
Deputy Director
Directorate ...
Directorate of Med Res
...

FROM
Ch, Neurol Br
Directorate of Med Res

DATE
4 Oct 56
CAPT LANGFITT/ago/24262

COMMENT NO. 1

(C) 1. Subject: Report on the Tulane Department of Psychiatry Contract, Clinical Studies of Neurological and Psychiatric Changes During the Administration of Certain Drugs.

(U) 2. Department of Psychiatry, Tulane University Medical School--New Orleans, Louisiana - Place.

Regraded ____ by authority of ____ OCT 1 0 19..
COMMANDER ..., Member Classified Document Review ..., A Cml C, MdS

(U) 3. Dates: 17 - 20 September 1956.

(U) 4. Agencies Represented: Neurology Br, Clin Res Div, Directorate of Medical Research, CW Laboratories, A Cml C, Md.

(U) 5. In June, 1956 this investigator visited Tulane in order to observe directly Chemical Corps contract work in progress. A trip report on this visit was submitted.

(U) 6. The present trip was undertaken in order to obtain the most current information available in preparation for the Tripartite Conference. In addition, detailed plans for future investigations by the Tulane contractors were discussed and a summary of this will follow.

(C) 7. Within the next two weeks a progress report will be received from Dr. Monroe detailing the use of psychotomimetic and psychotherapeutic drugs in several patients with cortical electrodes and permanently implanted deep electrodes. In this report he attempts to correlate electroencephalographic alterations with observed and measured behavioral changes.

(U) 8. Though the following discussion goes beyond the confines of the trip report as such I think it pertinent to attempt to define what these Laboratories hope to obtain from the Tulane contract and to what extent this has been realized thus far.

(U) 9. The background for these investigations is contained in a book, "Studies in Schizophrenia" by the Tulane Department of Psychiatry, Commonwealth Fund, Harvard Univ. Press, 1954. In this book Dr. Robert Heath and his group describe several years work attempting to find physiological and biochemical correlates of clinical schizophrenia. Of even broader perspective than this is the ultimate goal of an understanding of "mind-brain relationships." Any attempt to even briefly summarize this 500 page treatise would be futile. Perhaps the most significant finding for these Laboratories was that there were changes in the deep recordings (primarily septum and hippocampus) which are thought to be unique to schizophrenia and these became popularly known as "the schizophrenic spikes". (U)

CWL56C3483

DD FORM 96, 1 FEB 50 — REPLACES DA FORM 96, 1 OCT 48 WHICH MAY BE USED — U.S. GOVERNMENT PRINTING OFFICE

M-10-26-(56)-C

UNCLASSIFIED

Command Historical Office; CBDCOM
Edgewood Arsenal, MD
Row #2; File cabinet #78; Drawer #3

CMIRD-CW-M(C2)
SUBJECT: Trip Report, Tulane University, New Orleans, Louisiana, 17-20 Sep 56

(C) 10. In recent years it became apparent that here was a ready-made tool for the neurophysiological investigation of psychotomimetic and psychotherapeutic compounds. The following questions came to mind:

a. What are the effects of the "tranquilizers" on these subcortical abnormalities?

b. Do such drugs as LSD and mescaline produce changes comparable to schizophrenia in the EEG?

c. If LSD and mescaline do produce changes can these be blocked with the tranquilizers?

d. What are the behavioral correlates of these three neurophysiological situations?

(U) 11. It should be mentioned that though the majority of patients with deep electrode implantation have been severe schizophrenics subjects with non-psychotic illnesses have also been used (e.g., parkinsonism - and rheumatoid arthritis). It through these studies that the specificity of the "schizophrenic spike" was established and also offers the opportunity of studying non-psychotic subjects.

(U) 12. The forthcoming report from Dr. Monroe will deal with the effect of LSD and mescaline on deep recordings, the extent to which this effect is blocked by chlorpromazine and Frenquel, and the behavioral correlates of the EEG findings. Any detailed discussion will have to await receipt of the report. Suffice it to say that they believe there is a correlation between the psychotic-like behavioral changes observed and the presence of subcortical changes ("spikes", and paroxymal slow activity). When chlorpromazine is given the behavioral improvement correlates with a subsidence of the abnormal deep electrode activity. Frenquel has almost always been ineffective in both respects.

(C) 13. The following areas were discussed with respect to future investigations:

a. Dr. Samuel Peacock, formerly of these Laboratories, plans to study evoked potentials in patients with implanted electrodes. For the first time there should be an opportunity to present human corroboration of the vast amount of evoked potential studies in animals. Studies that have occupied so much of the effort of the Neurology Branch in the past few years (e.g., the transcallosal and specific sensory systems) could be undertaken in subjects. Once a firm neurophysiological approach has been established the effects of such compounds as LSD, mescaline, serotonin, chlorpromazine, etc. can be investigated.

b. A personal criticism of the progress report is the absence of a study of non-psychotic patients. One individual with Parkinsonism is

[redacted]

UNCLASSIFIED

CMRPD-CW-M(C2)
SUBJECT: Trip Report, Tulane University, New Orleans, Louisiana, 17-20 Sep 56

included but because of his uncooperativeness and associated technical problems the results have little significance. Therefore, it was suggested that future drug studies for our purpose, should be concentrated on subjects with non-psychotic illnesses. Whether or not non-psychotics given LSD or mescaline show subcortical abnormalities similar to schizophrenics is not elucidated in their reports. We are primarily interested in what effect tranquilizers have on these drug-induced changes. Thus, when LSD effects are superimposed on schizophrenic changes it is unnecessarily complicated.

(U) c. An additional future plan by Dr. Heath's group calls for electrode implantation in psychomotor epileptics. This should offer much promise because such patients range from nearly pure epileptics with non psychotic symptoms to individuals whose symptom complex is difficult to distinguish from schizophrenia.

(U) d. The behavior-EEG correlations are quite gross. When one sees the variety in both location and type of subcortical alteration plus the lack of a systematic appraisal of behavior change any accurate correlation would appear to be impossible at this time. The principal problem seems to lay in the attempt to correlate two observations - the EEG and behavior-neither of which they have made much attempt to measure.

(U) 14. In conclusion, I believe the Tulane Contract has much to offer the Chemical Corps in the fields of neurophysiology, neuropharmacology and neuropsychiatry. However, close liaison concerning future studies is imperative. If this had been established during the first year of the contract perhaps some of the above criticisms could have been obviated to the mutual satisfaction of all concerned.

THOMAS W. LANGFITT, Capt, MC
Chief, Neurology Branch

Cy Furnished:
ACC Procurement Agency

TEMPORARY FILE

CWR-56-C-3488
M-10-26-(56)-C

UNCLASSIFIED

Command Historical Office; CBDCOM
Edgewood Arsenal, MD
Row # 2; File cabinet # 78; Drawer # 3

UNCLASSIFIED

CMLRD-CW-H(C) (4 Oct 56)
SUBJECT: Trip Report, Tulane University, New Orleans Louisiana, 17 - 20 September 1956

TO: Deputy Director Director of Med Res
FROM: Ch, Clin Res Div Directorate of Med Res
DATE: 16 Oct 1956 COMMENT NO. 2
IR. SIM/ham/5251

On October 10 the Directorate received the current progress report, "Correlation of Rhinencephalic Electrograms With Behavior in Humans under the Influence of LSD and Mescaline". This report is acceptable to this Directorate. Close liaison and working relationships are being carried on with this group.

Van Sim

VAN M. SIM, M.D.
Chief, Clinical Research Division

Cpy furnished:
ACC Procurement Agency
A Cml C, Md.

Cpy ... 5 Nov 56

Page 1 of 1 Pages
Copy 1 of 5 copies

Regraded UNCLASSIFIED
by authority of Chief ...
OCT 1 0 1959
by CO...
Classified Do...
CW LABS, A Cml C, Md.

OCT 1 0 1959

TEMPORARY FILE

U

CONFIDENTIAL

CWL-56-C-3488
M-10-26-(56)-C

UNCLASSIFIED

Command Historical Office; CBDCOM
Edgewood Arsenal, MD
Row #2; File cabinet #78; Drawer #3