

## THE BLACK VAULT

This document was obtained from The Black Vault, an online database of declassified government documents. This particular record is housed in the MKULTRA/Mind Control Collection, a compilation of more than 20,000 pages declassified by the Central Intelligence Agency (CIA). The entire collection is free to download and online at:

http://mkultra.theblackvault.com



Sub-Project | 4

<b>《经验》</b>	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Sub-Project	<b>4</b> * (* (* (* (* (* (* (* (* (* (* (* (* (	STATE OF STATE OF	
Description	Date	Obligations	Expenditures	Balance 1		
Subject 11	19:35	Jeene Jee Je	56215H	33.1846 		
<u>r g.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	I was far tu	10 81367				
		11,243,10 3184b 866464				
			للعالمة المحالي			
				经自身的情况		
The country of the co						

11 Aug 77	igno-Cuthogetice 2. Sul st.  Livre 2 (Su not Fy 55)	SECTION SECTIO	ORIGINATIONS DISTRIBUTION SECTION	
11 1955 77	igno- Cuthospiter "2. Sul IV ween "2 ( Su not Fy 55)	8,864.64	ORIGINATIONS DISTRIBUTION SECTION	A STATE OF THE CONTRACT OF THE
	woen 2 ( he not Fy 55)		886464	
		while		
				PROVINCE OF THE PROPERTY OF TH
ŧ				
As the three termination of the			The control of t	
				er fall den mette engegenigtet er treu i det fellensenen met de ig, i men met i mette i fin det geligt er men gegennen i men en de geligt er de se der falledet en en de geligt er met i de geligt er g
				The second of th
	ത്രാന്റ് പ്രത്യാര് പ്രത്യാക വരുന്നു. പ്രത്യാക്ക് വരുന്നു പ്രത്യാര് വരുന്നു വരുന്നു വരുന്നു. വരുന്നു വരുന്നു വര സ്ത്രാന്റ് പ്രത്യാര് പ്രത്യാക്ക് വരുന്നു. അത്ര എന്നു വരുന്നു വരുന			

.

 $\mathfrak{E}$ 



#### 14 July 1961

MEMORANDUM FOR: Chief, Finance Division

YZA

: TSD/Budget Officer

SUBJECT

MKULTRA, Subproject 51-B, Invoice No. 12, Allotment 2125-1390-3902

L. Invoice No. 12 in the amount of \$10,712.00 covering the above subjecties attached. However due to a refund of \$535.57 from MKULTRA Subproject No. 44 (as per attachment) payment should be made as follows:

Cashier's check in the amount of \$9,764,43 drawn on a

Cashier's check in the amount of \$412.00 drawn on a

Both checks should be made payable to the

2. The checks should be forwarded to Chief, TSD/Research Branch, through TSD/Budget Officer, no later than 26 July 1961.

1. This is a final invoice. However, since it is anticipated that additional funds will be obligated for this project, the files should not be closed.

Chief T3D/Research Branch

Attachmenter
Invoice & Certifications

Distribution:

Orig & 2 - Addresses

I - TSD/FASS

1- Project 44 file

2 - TSD/RB

SD/

The last sequent committees there will be derived 12. The last of an experimental sequent of the committees of the last of the स्थान स्कार करा है अपने प्रत्या है के हैं। ये येन प्रत्या के स्थान करा के किया के किया के किया है किया है कि स स्थान करा के अस्ति प्रति के कुल क्षान के किया करा किया करा करा है जाति होता है है कि स्वार्थ के किया है किया क

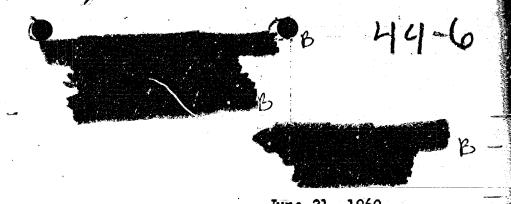
सह एक्ट देखान प्रसंदर्शकार स्थान देखानकारी, अन्य सीता पत्र , सन् ११६ वर १० वर्ष का वार्यापार स्वत the secretaries at the first manufacture of the first from the second of the second of and the Expension of the method by it who reveal seculation



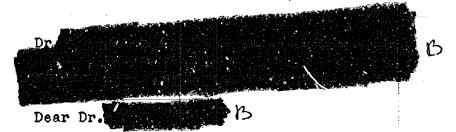
### CERTIFICATION

(3) R is hereby certified that under Subproject 44 at the close of FY 1960 a balance of \$535.57 representing unused funds remained. Therefore it is requested that \$535.57 of Invoice No. 12 remained to Subproject No. 51-B as a return of unused funds by 8-2502-10-001, MOR 336.

>

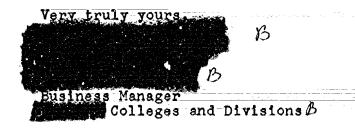


June 21, 1960



I am enclosing herewith an original and one copy of the final report of expenditures for the period of April 1, 1955, through March 31, 1959, covering the grant-in-aid\_to\_Dr.

Also enclosed please find a University Check
No. 89104, in the amount of \$535.57 which covers the
unexpended balance remaining in this account.



	b

Enclosures

cc: Dr.

# Colleges and Divisions

Receipts:

		955 \$ 8,108,00	
Chaster	received during 19	955	
CHACKS	1000100 200 = 10	656 16,216.00	4
Checks	Lecelacd garring + 3	720	
Ola a alem	received during 19	957 16,216.00 958 8,108.00 \$ 48,64	0 00
CUSCKS	TACATACK WAYAND TO	678 \$ 40.04	0.00
Charks	received during 19	950	

### Expenditures:

Salaries and Wages	_\$ 24,501,72	
Consumable Supplies	9,616.37	
Equipment	1 055.18	
Travel	1.293.72	·
University Retirement	351.59	
Workmen's Compensation Indirect Cost		\$ 48,112.43
Balance as of March 31, 1959	· · · · · · · · · · · · · · · · · · ·	\$ 535.57
Dorama -		



Business Manager Colleges and Divisions

#### APPROVED:



I have examined and approved the submitted expenditures.

Tatel 6/30/ TSS/Chemical Division

\*Final Report



27 January 1960

MEMORANDUM FOR: THE RECORD

SUBJECT

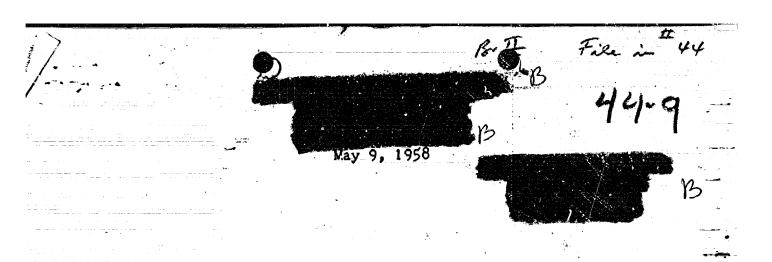
: Action on MKULTRA Audit Exceptions - TSS/CD

SP#44

Dr. has been contacted this date and an additional request made for submission of an accounting of furds since 3/31/53. We have been assured that action is being taken to comply with the request.



5



Dear Dr.

I am enclosing herewith an original and one copy of a financial statement for the period April 1, 1955, through March 31, 1958, covering the grant-in-aid from your organization to Dr.

Very truly yours,

Colleges and Divisions

# 

Receipts:			•	•	
ČL1	received	during 199	55	\$ 8,108:0	0 4
Checks	received (	during 19	70	10,210,0	
Checks	received_c	during 19	<b>57</b>	16,216.0	<u>o</u> \$4

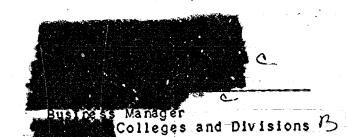
\$40,540.00

Expenditures:	
Salaries and Wages	\$19,061.72
Consumable supplies	6,699.64
Equipment	2,434.65
Travel	826.90
University Retirement	859.51
Workmen's Compensation	274.68
Indirect Cost	7,750.00

Balance as of March 31, 1958

37,907.10

12.2. . \$ 2,632.90



APPROVED:

Thave examined and approved the submitted expenditures.

es construent de differen

TSS/Chemical DivisTon

Date

1/1/59

\*Interim report

#### RECEIPT

I hereby acknowledge receipt of the following two checks:

Official Check No. 209-330405, drawn on of the amount of \$16,216.00, payable to the

Treasurer's Check No. FE 12418, drawn on Company E of the dated April 30, 1958, in the amount of 3648.64, payable to the

Dato: 6 Way 58

NO. 336 8- 2502-10- 001 ALLOT ALLOY Sel. 11 **QBT\_LIGATICES** CELICACIONS CULLATIVE LATE RIMARKS AND KATTREENES LIQUIDATED EXPEND. DICORRED 6 AUG \$ 16,864.64 241APR 16 864.64 RECEIVED. 5,544 CHECK THE AMOUNT OF \$ 642 064 Section Louisease



21 April 1958

MEHOPANDUN	TOR:	CHIEF.	PIKANCE	DIVIBICA

TTA

1 188/Budget Officer

SUBJECT

: MOULTRA, Subproject 44, Invoice #5, Allotrent 8-2502-10-001

1. Invoice No. 5 for the above subproject is attached.
Payment should be used as follows:

Cashier's check in the assumt of \$16,216.00, drawn on a state bank,

Cashier's check in the amount of \$648.64, drawn on bank.

Both checks should be made payable to the

B

- 2. Please forward the checks to Chief, TSS/Chemical Division, through TSS/Budget Officer, no later than Monday 12 May 1958.
- 3. This invoice represents the total amount currently sutherized under Subproject 56. However, since it is enticipated that additional funds will be obligated for this project, the files abould not be closed.

chief \_\_\_\_\_\_A

Attachments: Invoice and Certifications

Distribution: Orig & 2 - Addressee

> TSS/FASB 2 - TSS/CD

I CENTER THAT PUNDS ATE AMAILAND 1888 OF BUILDING STATE OF STATE O

ACTROCHES OF ACTROMISM



INVOICE

Yor services

\$16,864.64

#### CERTIFICATIONS

(1) It is hereby certified that this is Invoice 80. 5 applying to Subproject 44 of WWIRA, that performence is satisfactory, that services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Chief, TSS/Chemical Division

Dete:

(2) It is hereby certified that this invoice applies to Subproject 44 of MULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Data:

12 August 1957

MONORARDON	708:_	COLOTTE	CLIER
------------	-------	---------	-------

Pinence Division

Project MCULTRA, Subproject 44

Under the authority granted in the Monorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this outhority in subsequent memoranda, Subproject 44 has been approved, and \$16,864.64 of the over-all project MULTRA funds has been chligated to cover the subproject's expenses and should be charged to Allotment 8-2502-10-001.

> Acting Chief 185/Chemical Division ...

APPROVED FOR CELICATION OF FUNDS:

Research Director

Distributions

Orig & 2 - Addresses

1 - TSS/CC

Y - TSS/FASB 1 - TSS/SRB

2 - TSS/CD

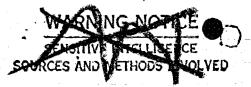
THE

44-16

12 August 1957

nenorabon vost corpercetes	
ATTENTION : Pinance Division	
BUBIECT : Project MULICA, Subproje	ct 44
Union the authority greated in the Ma	botab autoarum
13 April 1953 from the DOI to the DD/A, so	d the extension of this
authority in subsequent removerate, Subproj	
and \$16,864.64 of the over-all project MCC	•
obligated to cover the subproject's expens	
to Allotzont 8-2502-10-001.	eren eren eren eren eren eren eren eren
to attocome one westowers	<del></del>
The second of th	Maria Charles A
	Acting Chief TSS/Chemical Division
APPROVED FOR OBLIGATION OF FORDS:	
AFFROM I WINDALIAN WE I WANTED	
Research Director	
Date	
Distributions Oris & 2 - Addresses	
1 - TS3/CC 1 - TS3/FASB 1 - TS3/SRB	
2 - TSS/CD	•

SECULET





3 August 1957

THE RECORD MEMORANDUM FOR:

SUBJECT

Project MKULTRA, Subproject 44

The purpose of this subproject is to continue the research of the University of being carried out by Professor This work is aimed at the design of laboratory methods for screening psychochemical materials. These methods can then be the basis for procedures to be carried out in other TSS/CD laboratories on a classified basis.

- 2. During the past year the goal of this project was the perfection and testing of two specific assay methods related to the above problem. This goal was adequately reached and in addition a considerable amount of incidental information was accumulated which has added to the general knowledge of materials which affect the central nervous system.
- The funds for this project will be transferred using the as a cut-out in the usual=
  - 4. The total cost of this program for a period of one year beginning 1 July 1957 will be \$16,216.00. To this must be added a four percent (4%) service charge to the total cost for the above period will thus not exceed \$16,864.64. or its services. D
  - has requested the University to submit to b them a summary accounting of monies received from the Fund. Also, they requested the return of any unexpended funds received under a grant-from the Fund at the end of the program.
  - 6. Title to any permanent equipment purchased by funds granted the University shall be retained by the University in lieu of higher overhead rates.
  - 7. It is agreed that documentation and accounting for travel expenses which are reimbursable by the University shall conform to the accepted practices of that Institution.

Attachments: Proposal Budget

Acting Chief TSS/Chemical Division

APPROVED FOR OBLIGATION OF FUNDS:

Research Director

IMPDET: CL BY

DEPARTMENT OF

June 11, 1957



Dear Dr.

Thank you for your kind reminder, over the telephone, last week in asking me for a request in the renewal of our grant than the remainder of the second for another year beginning July 1, 1957.

A progress report of the project during the academic year 1956 - 1957 is appended.

The general plant of our research for the coming year consists in further perfection of methodology and in the examination by our new methods of a large number of important agents with potential effects on behavior. This research is not supported by other sources.

Our request is again for the same sum of \$16,216.00. The proposed budget plan is as follows:

Salaries (Research Assistants and Technicians)	10,000	
Equipment	500	
Expendable Supplies	2,037	
Travel	600	

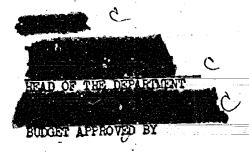


150 Workmen's Compensation Employer's Contribution to Retirement\_System 813 University Overhead or Indirect Costs 15% 2,116 \$16,216.00

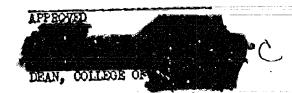
I shall be greatful if your Foundation will support our project for another year.

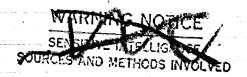
Sincerely yours,

and Head of the Department Principal Investigator



Total







I hereby acknowledge receipt of the following two checks:

Cashier's check No. DM 37787, drawn on

in the amount of \$10, 810, 67, payable to the

Cashier's check No. A105603, drawn on the

1956, in the amount of \$432.43, payable to the

10 September 1956

### MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA:

TSS/Budget Officer/

SUBJECT:

MKULTRA Sabproject 44

Invoice No. 4, Allotment 8-2502-10-001

1. Invoice No. 4 for the above subproject is attached. Payment should be made as follows:

Cashler's check in the amount of \$10,810.67, drawn on a bank.

Cashier's check in the amount of \$432.43, drawn on a bank.

Both checks should be made payable to the

2. Please forward the checks to Chief, TSS/Chemical Division through TSS/Budget Officer by Monday, I October 1956.

3. Tais is a final invoice. A total of \$16, 864.64 was obligated under this subproject during FY 58. However since it is anticipated that additional funds will be obligated for this project, the files should not be closed.

> SIDNEY GOTTLIEB Chief : TSS/Chemical Division

Attachments: Invoice & Certifications OBSIGATION RESERVED 100 2582 CHEACE TO ME THE SERVE 6 - 7539-10 - 60/

Distribution:

Orig & 2 - Addressee

1 - Comptroller

1 - TSS/FASB

2 - TSS/CD

CHECK DY 21787 THE AMOUNT OF EN PO

RECENTED 18,850

aca (10 September 1956)

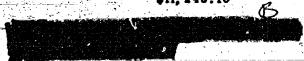
CHECK HOSE THE AMOUNT OF SELL



4420

For services

\$11, 243.10



#### CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 4 applying to Subproject 44 of MKULTRA, that performance is satisfactory, that the
services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file
in TSS/CD, that this bill is just and correct and that payment thereof
bas not yet been made.

Chief, TSS/Chemical Division

Date:

(2) It is hereby certified that this invoice applies to Subproject 44 of MKULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date:

Receipt is hereby acknowledged of the following two checks:

Cashier's Check No. DM 36875, dated July 11, 1956, drawn on the in the amount of \$5,405.33, payable to the

Official Check No. G 9586, dated July 12, 1956, drawn on the in the amount of \$216.21,

Receipt is hereby acknowledged of the following two checks:

Cashier's Check No. DM 36875, dated July II, 1958, drawn on the

\$5, 405, 33, payable to the

Official Check No. G 9586, dated July 12, 1956, drawn on the in the amount of \$216.21.

# July 1958

		THE RESERVE AND ADDRESS OF THE PARTY OF THE	*** *** *** **** ****
AARRES	ANDUM YOR! C	UTMP. PINANCE.	DIAINOR
MARK MARK JUL	ARDUM FORES	STATE OF THE PATRICIAL AND ADDRESS OF THE PARTY OF THE PA	

VIA:

T53/Budget Officer

SUBJECT:

MKULTRA Subproject 44 Invoice No. 3, Alletment 8-2502-10-001

1. Invoice No. 3 for the above subproject is attached. Payment should be made as follows:

Cashier's check in the amount of \$5, 405.33, drawn on a

Cashler's check in the amount of \$216.21, drawn on a bank.

Both checks should be made payable to the Other invoices will follow later.

2. Flease forward the checks to Chief, TSS/Chemical Division through TSS/Budget Officer by Wednesday, 18 July 1958.

> Acting Chief TSS/Chemical Division

Attachments:

invoice & Certifications (Orig & 1)

Distributions

Orig & 2 - Addressee

1 - Comptroller

1 - FASB/TSS

2 - TSS/CD

I CERTIFY THAT FIDEDS ARE AVAILABLES 5 CHARGE TO ALLE THEIR NO. 6-3502-10-WI

CHECK#6 8860N THE AMOUNT OF \$216-21

RECEIVES.16,101

Julyulo 6114 EFFECK#GARAN THE WOODL OF #249233



For services

\$5, 821.54



#### CERTIFICATIONS

(i) It is hereby certified that this is Invoice No. 3 applying to Subproject 44 of MKULTRA, that performance is satisfactory, that the
services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file
in TSS/CD, that this bill is just and correct and that payment thereof
has not yet been made.

Acting Chief, TSS/Chemical Division

Date:

(2) It is hereby certified that this invoce applies to Subproject 44 of MKULTRA which was duly approved, and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Research Director

Date:

6-2503-10-001 THE TANK THE Mark The State of SOLEMETERS. TATE . POWERS AND RECORDER mino del 25 June (61955 16 864 64 5 JUL 5,631.54 11, 243.10 10,812.43 11 588

SERVER

25 June 1955

44-24

MEMORANDUM FORE COMPTROLLER

ATTENTION:

Finance Division

SUBJECT:

MKULTHA, Subproject 44, Additional Authorization No. 3

1. Under the authority granted in the memorandum dated 13
April 1953, from the DCI to the DD/A and the extension of this
authority in subsequent memorands. Subproject 44 was previously
approved. Under the same authority an additional sum of \$16,864.64
has been authorised to cover the subproject's expenses (thereby
bringing to a total of \$25,728.38 funds obligated during PY \$6),
to be charged to Allotment 8-2102-18-001.

Acting Chief
TSS/Chemical Division

Approved for obligation of funds:

A 28 1553

CERTIFY THAT STATES THE SYMMABLES SUBARILLES OF THE STATES OF THE STATES

Research Director

AUTHORISMS SEETED

Dates

Distribution:
Orig 4 2 - Addressee

1 - TSS/OC: DI

1 - 155/FA5D 1 - TSS/SRB

2/ T85/CD3 S# VH 128

TSS/CD: (25 June 1956) A

DRAFT/HWB/aca

44-25

25 June 1956

MEMORANDUM FOR: THE RECORD

SUBJECT:

Project MKULTRA, Subproject 44

tinued partial support of Professor.

The solution to the problem of assay methods of this type is of paramount importance to a considerable area of the work going on in TSS/CD. The lack of adequate a sthods of this kind has proved to be a bottleneck in the synthetic chemical field as well as in that of the extraction of botanical sources across the board.

- 2. In addition to being eminently qualified to pursue this study, Professor specialized knowledge in the field of curarizing agents and his up-to-date knowledge of laboratories and personnel has been of great value to the Agency in the past.
- 3. The physical facilities made available by this project are as follows:
  - 1. The complete pharmacology testing laboratories of the

2. A ward with subjects for human testing at

3. The use of equipment and consultations with personnel in other medical departments at the

4. The funds for this project will be transferred using the usual manner.

5. The total cost of this program for a period of one year beginning 1 July 1956 will be \$16, 216.00. To this must be added a four percent (4%) service charge to the for its

Downgraded to: [@llingual] by a thority of date: 1 1077

ESAMPDET : CL b. LOGAS

44-25

. 2 -

services. The total cost for the above period will thus not exceed \$16,864.64.

- as requested the University to submit to them a summary accounting of monies received from the Fund. Also, they requested the return of any unexpended funds received under a grant from the Fund at the end of the program.
- 7. Title to any permanent equipment purchased by funds granted the University School of Shall be retained by the University in lieu of higher overhead rates.
- 8. It is agreed that documentation and accounting for travel expenses which are reimbursable by the University shall conform to the accepted practices of that Institution.
- 9. It is agreed that technical reports reflecting the progress of the research program should be submitted at mutually acceptable intervals.
- 10. is cleared TOP SECRET by the Agency and is aware of the sensitive nature of the work.

Acting Chief
TSS/Chemical Division

Attachments:

Proposal Budget

APPROVED FOR OBLIGATION OF FUNDS:

Research Director

Date: June 26, 1916.

Distribution:
Original only

R. C. S. C.

by ad ority date: 1981 Care

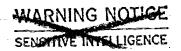
IMPDET; CL BY

### 14-25

#### PROPOSAL

The results of the first year's work in this research program indicate that it is quite possible to design methods whereby chemical compounds having certain types of pyschomimetic effects can be detected without recourse to human testing except as the final confirmation. In order to do this it is, of course, necessary to determine first in model compounds of known potency those measurable peripheral effects which are related to the desired psychomimetic effect most directly. In other words, a given chemical grouping in a molecule may be responsible for certain peripheral reactions due to its presence in the peripheral circulation and yet be responsible also for a vastly different effect in the central nervous system due to the different metabolic processes responsible for the characteristic activity of the different types of tissue. Very few chemical compounds are known which produce only one kind of effect in the animal body. Compounds which produce the desired psychomimetic effect are no exception to this and in general seem to have a relatively wide spectrum of other effects on the animal. Since we are not at present able to measure psychological changes in animals with any degree of certainty we are limited to measurement of changes in those aspects of central nervous system activity which are reflected in the periphery or to purely peripheral effects of the chemical compound.

Two quite different families of problems emerge from a consideration of these facts. First of all, the detailed pharmacology of a number of materials having the desired activity has to be assembled, either from the literature or by determination. Once this information is at hand an analysis of the relationships between the various measurable effects coupled with the knowledge of how such effects are produced can lead to hypotheses about the relationship between various peripheral and central nervous system effects. These hypotheses can then be tested by experiment to indicate which measurable peripheral effect or group of effects is most likely to be an accurate measure of the psychomimetic effect. We are also faced here by the fact that we must determine whether a given compound has access to the body area of interest in addition to possessing the proper configuration to produce a psychomimetic effect once it gets there. This latter question is brought about by the existence of the blood-brain barrier which denies access to the central nervous system to many peripherally active compounds and possibly..... on the basis of chemical groups quite unrelated to those responsible for the compound's activity. Therefore, in order to make a useful screening technique we must not only measure activity but also the ability to cross this barrier with ease....



The work so far has indicated that chemical groups which alter the action of the body tem perature regulating center in a specific way seem also to possess the desired psychomimetic activity and such a test appears to have certain practical advantages from a laboratory point of view. Several other workable tests involving small animals such as the measurement of total body activity may also be useful indices of psychomimetic activity.

In the course of the work this year we have tested a number of compounds of a completely different chemical nature from the known psychomimetic agents. The animal tests indicate that these compounds may be psychomimetic in man. During the coming year we propose to complete the work on the screening techniques so far developed and put them on a basis that will make them useful as routine laboratory test procedures. Also, we shall continue work with the new agents, carrying them to human test to verify their psychomimetic activity. In addition, we will continue to test other series of compounds available to us as candidate agents in this area and those compounds submitted by the

•				
AMOUNT	1	101	ľΑ	Ļ
	•••			
•				•

ITEM	AMOUNT	TOTAL
Salaries:		-
Principal Investigators - (charged to University)		
Research Associate . (Dr. Granduate Student	\$6,000.00 1,600.00	
		\$ 7,600.00
Equipment and Supplies		4,200.00
Travel and Other Expenses		800.00
Workman's Compensation on \$7,600.00 @ 1.5%	List	114.00
Retirement on \$2,000.00 @ 7.79%	······································	156.00
	Subtotal	\$12,870.00
Indirect Cost @ 26% of Subtotal	‡	3,346.00
	TOTAL	\$16, 216.00

9-44-26

#### RECEIPT

				<b>A</b> A	<b>1</b>	4-1	محالة معالا	AAAA	
T	harahe	acknewledge	receipt	AZ 1	Q.	20	Frankroß	CITAC	F-6 +
	ALC: TVJ	# <del></del>							

Official Check #19209528 dated 22 Sept 55,

Cushier's Check #UNIA122 dated 22 Sept 55,

In the amount of \$10,810.67,

Cashier's Check #UM14123, dated 22 Sep 55,

% in the amount of \$432.43,

all three payable to the

13

Septenter 28 1955

X E

44-27

#### 16 September 1955

NEMBARDUM FOR CHILD. PIXARCE DIVISION

YIA

: TSS/Budget Officer

EURINCT

MULINA Subproject AA, Invoice /2 Allotment 5-2502-10-001 & 6-2502-10-001

1. Invoice /2 is attached covering the above subproject. This is a final invoice. It is requested that payment be made as follows:

One cashier's check in the amount of \$10,810,67, and a second sheek for \$432.43, both draws on a best and perable to the

2. Both checks should be forwarded to Chief, TSS/CD, through TSS/Budget Officer no later than 30 September 1955.

These two invoices covering this subproject aggregate \$15,864,64 and make use of the FY 55 funds obligated under this subproject plus the FY 56 funds obligated to date. Since it is expected that additional obligations of finds under this subproject involving correct Fiscal Year funds will be made, the files on this project should not be closed.

> SIDHIY COTTLINE Chief : TSS/Chemical Division

Attachmentar Invoice & Certifications

CERTIFY THAT FUNDS ARE AVAILABLE.

Distributions

Orig & 2 - Addresses

CRUGATION REFERENCE No.

222 5- 2502-10-00/2378

1 - Comptroller

CHURCE TO ALLOTHER NO.

6- 2502-10-001 8864.

1 - TSS/FASB

2 - TSS/CD

[13\_September 1955]

CHECK# 422 N THE AMOUNT OF \$400.67

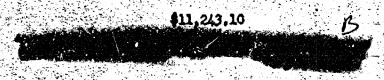
RECEIVED, 27 器

AUTHORIZING OFFICER

9 44-27

INVOICE

For services



#### CERTIFICATIONS

(1) It is hereby certified that this is Invoice #2 applying to Subproject 44 of MULTRA, that performance is satisfactory, that the services are being accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts is on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

Chief, TSS/Chemical Division

Datas

(2) It is hereby certified that this invoice applies to Subproject 44 under MKULTRA which was duly approved and that the
project is being carried out in accordance with the memorandum
dated 13 April 1953 from the DCI to the DD/A, and the extension
of this authority in subsequent memoranda.

Research Director

Dates

SEPTE.

44-28

## 9 August 1955

WINKELWOOM FOR I COMPTROLLE										
	R	71R(	GO A	-	Łä	PYR	MAN M	ı	-	100

ATTESTOR

s Tinance Division

SHALLERS.

MINISTA, Subproject 44, Additional

Authorisation Ro. 2

Noder the authority granted in the memorandum dated

13 April 1953 from the DCI to the DD/A, and the extension

of this authority in subsequent memorands, Subproject 44

was previously approved. Under the same authority an

additional sum of \$8,864.64 has been authorized to cover

the subproject's expenses, (thereby bringing to a total of \$3,864.64 funds obligated during FI 56) to be charged to

Allotmost 6-2502-10-001.

COLUMNION OF LANCE!

Sidney Gottlies

Chief
TSS/Chemical Division

J	44	90	red	D	30	eto	r

Dates

I CERTIFY THAT FUNDS ARE AVAILABLE:
OBLIGATION REFERENCE No. 222

AUTHORIZING OFFICER

CHARGE TO ALLOTMENT No. 6-0532-10-001

Distribution: Orig & 2 - Addresses

1 - TSS/00

11 - TSS/FASB

1 - 183/583

2 - TSS/CD

STATE

A

MEMORANDUM FOR: THE RECORD

SUBJECT

Addendum to Subproject 44

1. The purpose of this addendum is to set forth the mutual administrative responsibilities of the contractor and sponsor.

C.2. The above subproject represents the research program of Dr.

financed by MKULTRA, covering the period of 25 April 1955 through

31 March 1956.

- submit to them a summary accounting of monies received from the Fund. Also, they requested the return of any unexpended funds received under a grant from the Fund.
- granted the University, School of the University in lieu of higher overhead rates.
- 5. It was mutually agreed that documentation and accounting for travel expenses which are reimbursable by the University shall conform with the accepted practices of that Institution.
- 6. It was agreed that technical reports reflecting the progress of the research program shall be submitted at mutually acceptable intervals.

SIDNEY COTTLIES

TSS/Chemical Division

APPROVED:

Chief, TSS

Distribution: Orig & 1 - TSS/CD

**5940** 



CERTIFICATE

5 KM

I hereby certify receipt of Cashier's Check No. FE4633, in the amount of \$5405.33, drawn on the payable to the Date:

# 44

· ·			MEMORANDUM	RECE IPT		APR 131	
	то:		1 1			DATE	•
	FROM:			‡ •	-c	Surveyed IN	
÷	SUBJECT:			1. <u>.</u>			
	. I hereby	acknowledge · rece	ipt of the fo	ollowing:			•
		R.		Comments with a series	n de et 25		
•		CHECK### RECEIVED.	IN THE AN	10UNT OF	\$ 3773.33		
			this receipt			C	<u> </u>
	Please return	aigned copy(ies) of		4		PIENT	
	TO FORM NO. 36-66 MAR 1949					TE REC	.A

CERTIFICATE

I hereby certify receipt of Cashier's Check No. UM11788, in the amount of \$216.21, drawn on the 75 to Cashier's Check No. UM11788, in the payable Pate:

FROM:  SUBJECT:  I hereby acknowledge receipt of the following:  CHECK#MINE IN THE AMOUNT OF \$-26.22  RECEIVED:	
SUBJECT:  I hereby acknowledge receipt of the following:	
CHECK# MIN THE AMOUN RECEIVED.	
Alexa Carlos of this receipt	
Please return signed copy (les) of this receipt	

1 April 1955

REPERLEDIN FOR: CHIEF, PIRARCE DIVISION

185/Budget Officer

: Project MAULIRA, Subproject No. 44 Invoice #1, Allotaset 5-2502-10-001

Invoice No. 1 for Subproject 44 of Project MAULIRA 18 attached. Other involces will follow later. It is requested that payment be made by two cashiers checks, one in the amount of \$5,405.33, and one for \$216.21, payable to the Tallette sheeks should be sent to Chief, TES/CD through TSS/Bodget Officer by Wednesday, 6 April 1955.

> SIDYKY COITLIES Chief TSS/Chemical Division

ittechments. - Invoice & Certifications

Distributions Orig & 2 - Modressee

1 - Comptroller

J1 - TSS/FASB

2 - TSS/CD

CHECK# 43 IN THE AMOUNT OF \$5415.33

RECEIVED. APR 1 3 1955

HECK#4/100 THE AMOUNT OF \$2/62/ RECEIVED. APR 1 4 1955

I CERTIFY THAT FUNDS ARE AVAILABLE!

OBLIGATION RESERVICES NO.

CHARGE TO ALLCTRALITY Jos

4 APR ENTO AUTHORIZING OFFICER



SECRE

· 414-34

### INVOICE NO. 1

31 March 1955

For services.....\$5,621.54

A STATE OF THE PARTY OF THE PAR

B

## CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 1 applying to Subproject 44 of Project MKULTRA, that performance was satisfactory, that the services were accomplished in accordance with mutual agreements, that a detailed agenda of the payments and receipts are on file in TSS/CD, that this bill is just and correct and that payment thereof has not yet been made.

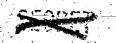
SIDNEY COTTLIES
Chief, TSS/CD

(2) It is bereby certified that this invoice applies to Subproject AA under Project MEULTRA which was duly approved and that the project is being carried out in accordance with the memorandum dated 13 April 1953 from the DCI to the DD/A, and the extension of this authority in subsequent memoranda.

Ate:\_\_\_\_

Research Director

H



3**59312** 

9, 44-35

22 March 1955

MEMORIANDUM POR : COMPTROLLER

ATTENTION & Pinance Division

REJECT : Project MMINE, Sobproject 44

Spril 1953 from the DCI to the DO/A, and the extension of this satherity in subsequent assorands, Subproject 44 has been approved, and \$3,000.00 of the over-all project EXVISEA funds has been obligated to cover the subproject's expenses and should be charged to Allotsont 5-2502-10-001.

SIDALL COTTLIES

Chief

755/Chemical Division

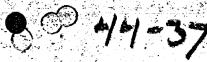
13-PROVED	YOR OBLIGATION
OF PURES	· A A A A A A A A A A A A A A A A A A A
East Section 1	earch Director
	WR. 13 to 1955 cc
Bater	
Distrib	111011
Orig 8	2 - Addressee
	✓1 - TSS/00
	1 - TSS/FASB 1 - TSS/SRB
	2 - TSS/CD
I CERTIFY THAT FUNDS	ARE AVAILABLE;
OBLIGATION REFERENCE No.	The state of the s
CHACE TO MICHE TO	5-7517-10-101
	1 APR ENTO
	AUTHORIZING OFFICER

• 44-36

			IDER WILL CIR	CLE CLA	ACATION TO	MOTTOR GIA 40	) ()	
7			CENTRA	L INTELI	IGENCE A	GENCY		
Ç			<b>OFFICI</b>	AT. RO	MITH	SLIP		
	4.0					11.00		3 *X1
ij				44.00				
4	TO	district the second	- Kristini	3 - C.	SATES SEED	INITIAL	S D	ATE _
4		ISC	loc		A.		110	(u)
May be	2	135	165					到
1.50								
10 (P) (P)	1							
ζ. *	\$ <b>\$</b>	<b>**</b>					等 第	
2	FROM	ور قدري پيون ج	18 18 m	-/	V., (2000), 2000 €	INITIAL	s D	ATE
72 X	1.	TSS	:   25		P		1 7/	28
	2							
	3				10.00			
	12.00		3-48-46	2 20 - 02				3,338
-	<u> </u>	APPROYAL		_ INFOR	MATION		SIGNA	TURE
-	200	的學科。	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	harris de la companya	دو شده در است. شهریان م			· · · · · ·
		ACTION		DIREC	T REPLY		RETUI	IN
	िट	COMMEN			RATION OF	REPLY.	DISPA	TCH
1		AANANAA		7 05001	JUENKITIA			
`		CONCURA	ENCE		MENDATIO	71 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	FILE_	
4,	P -			7				
	/ ven	arks:		是一次是				多计
	11 -							
	113			9.44.		17.48		
	31/2							
	经上							
4	18		2000年					
į	12.1							3. T
٠. أ	15			1.54				
•	1	在 整理						· · · · · · · · · · · · · · · · · · ·
	智.		CON	FIDENT		r in Language (n. 1925). Paris in Paris in Harris	CLASSII	

Downgraded to: CONFIDENTIAL
by authority
date: June 1977

The factor



DRAFT/22 March 1955

MEMORANDUM FOR: THE RECORD

SUBJECT

: Project MKULTRA, Subproject 44

- 1. The purpose of this project is to provide funds for the study of the pharmacodynamics of derivative and homologues of hydrogenated aromatic amines.
- 2. The attached proposal indicates the extent of the investigations that will be carried out in these facilities available at the attached proposal indicates the extent of the investigations.
- 3. The funds for this project will be transferred using the the usual manner.
- 4. The cost of this program for a period of one year will be \$16,216.00. To this must be added a four percent (4%) service charge to the for its services. The total cost for the above period will thus not exceed \$16,864.64. At the present time, the sum of \$3,000.00, representing \$7,680.00 to the plus \$320.00 fee to the is being committed. The balance of the total will be committed at a later date.
- 5. Both Dr. and Dr. are cleared TOP SECRET by the Agency and are aware of the sensitive nature of this work.

TSS/Chemical Division

APPROVED FOR OBLIGATION

OF FUNDS:

APPROVED:

Research Director

ate: 24 Mar 55

Attachment: Proposal Chief, TSS/Chemical Division

APPROVED FOR ADDITIONAL APPROPRIATION OF \$8,864.64.

Research Director

Dengraded to: Difficult only.

3 1977

Date: 10 August 1955 -

IMPOST: Co Da

DEPARTMENT OF

January 28, 1955



Enclosed is a research proposal concerned with the investigation of the pharmacological properties of aromatic amines. The cost of the project is estimated at \$16,216.00 for the duration of one year.

This proposal is submitted in duplicate to you and your board of directors. I hope that your board will pass favorably on this application.

Sincerely yours,

N. D.

Professor of

Dean, College

Enclosures - 2

Downgraded to: COM HINTEL Southowity of: 18745 Laye: June 1977

WAIL VINC HOTICE SCHOOLINE GENCE QUICCES AND METHODS IN YOU A. GENERAL STATEMENT REQUESTING CONSIDERATION OF PROPOSAL

It is requested that the consider a proposal for their support of a project concerned with the investigation of the pharmacological properties of certain aromatic amines which possess sympathomimetic activity.

B. BRIEF REVIEW OF SCIENTIFIC BACKDROUND OF PROPOSED INVESTIGATION

It is generally considered, today, that the responses and physical adjustments of an organism to an environmental stress consist of two phases which occur in sequence. The first phase of rapid adjustment is conceived to be mediated through the autonomic nervous system; the second phase of adjustment to chronic stress is believed to mediate chiefly through the pituitary-adrenal system.

Although the majority of sympathonimetic amines which have been studied pharmacologically have been derivatives of alkylamines, recent studies have indicated that a variety of non-aliphatic amines exist in the mammalian body and possess significant physiological activity. Two examples of such non-aliphatic compounds may be mentioned: Adrenoxine, a metabolic product of epinephrine, and 5-hydroxytryptamine or serotonin, a substituted heterocyclic amine. Both adrenoxine and serotonin possess a physiological activity analogous to that of epinephrine.

Beta-tetrahydronaphthylamine is a prototype of a series of compounds first synthsized by Stern in 1888 which possess significant sympathomimetic activity, but which are not ethanolamines. One major difference between the actions of tetrahydronaphthylamines and those of the ethanolamines is that the actions of the former are not antagonized by ergotamine, nor are they potentiated by cocaine. (Bouckaert, J. J., and Heymans, C., Arch. Int. Pharmacodyn., 35:137, 1929.) Perhaps because the most obvious effects of tetrahydronaphthylamines are on body temperature, few studies of their general pharmacological actions, and specifically their sympathomimetic activity, have been made since the classic study of Jonescu in 1909.

## C. TECHNICAL DESCRIPTION OF THE PROPOSED WORK

#### 1. Objectives:

It is proposed that the pharmacodynamics of a series of derivatives and homologues of beta-tetrahydronaphthylamine be studied. The pattern of studies would be arranged to meet the following objectives:

- a) The evaluation of the pharmacological effects of a series of such compounds. Particular attention would be paid to general toxicity (potency) and the effects of the compounds on the cardiovascular system in particular, and on smooth muscle, in general.
- b) An attempt to relate the chemical structures of such compounds to their biological effects and their potencies in producing the effects. The chemical structure of the compounds under study would also be related, if possible, to the chemical structures of sub-

WARNING TOTICE

1/475

c) The potentiation and the antagonism of the effects of the compounds under study will be investigated in the light of the actions of the same synergistists and antagonists on the biological activity of the naturally occurring ethanol amines. The biological interaction of the compounds to be studied and the sympathomimetic ethanol amines will be investigated, as well as the ability of the derivatives of tetrahydronaphthylamine to modify the responses of the autonomic nervous system to stress.

#### 2. Nethods:

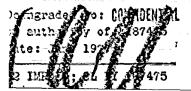
The methods to be employed will include studies of toxicity of the compounds, their effects on the cardiovascular system in situ and the effects on smooth muscle containing organs - such as the ileum, and uterus - in situ and in vitro, and such special studies, using specialized techniques, as may seem necessary (such special studies might include electrophysiologica techniques for the study of skin temperature changes, central nervous system activity, activity of autonomic ganglia, etc.)

D. DESCRIPTION OF FACILITIES AVAILABLE FOR PERFORMING THE CONTEMPLATED WORK

Laboratory space and facilities for research on cardiovascular system including heart-lung preparations; facilities for smooth muscle work in vitro and in vivo. Facilities for toxicologic research. Facilities for electrophysiologic research on the central and autonomic system, including electroencephalography, isolated nerve potentials, oscillography, stereotoxic instrument, etc.

E. NAMES OF PRINCIPAL INVESTIGATOR AND PROFESSIONAL ASSOCIATES

и.р. С , и.я., и.р. С



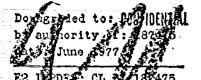


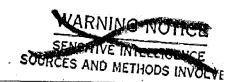
# P. ESTIMATED DURATION OF PROJECT AND YEARLY BUDGET BREAKDOWN

It is estimated that the duration of the project will be about one year. In estimated budget for a year of such research would be:

ITEM AMOUNT _	TOTAL	
Salaries Principle Investigator (Charged to University) Graduate Student \$3600.00 Heuropharmacologist, 3 months at \$500 per month 1500.00	ζ.,	
Research Pharmacologist, 5 months at \$500/month 2500.00	\$7600.00	
Equipment and Supplies Including animals, drugs, etc.	f500°00	
Travel and Other Expenses	800.00	* * * * * * * * * * * * * * * * * * *
Workman's Compensation on \$7600.00 at 1.5%	111.00	· ······
Retirement on \$2000.00 at 7.79%	156.00	
Subtotal	12,870.00	
Indirect Cost at 26% of Subtotal	3,346.00	
TOTAL	\$16,216.00	

Participation by the will include the salary of the principle investigator, routine clerical help, laboratory space and utilities (including laboratory equipment for studies in experimental pharmacology and neuropharmacology).





inimediate or supervisory charge of the investigation

## AGREEMENT FOR COOPERATIVE INVESTIGATION TO THE PRINCIPLE OF

AN Live money committed for this investigation shalf be lieft as a special frank and skull be go garried on the

gii hil seuidhi ustiga, ard can rostana cateessar ist in clorificit, yendaa et ca incoriorita stalika

To provide the standard of the second of the second provides and the second of the sec

ည်းချား အေပါက်သည်သို့ မြေညာအေပါက်က အသုံးသည်။ လို့အသည်သည် သိပ်တြင်းပြုသည်။ မောင်းသည်သည် သင့်သော ဂါမ်ား အခြေ ကြောင့်သူ မယ်ညနေ့ ကျည့်နှင့်မှာ မောက်ကြောင်သည်။ အခြေသည် ရေသည် သည် သည် တက်ချားသည် သို့သည် သေးအချားများ သည်အသည်။

्रेड हैं कि <mark>ब्रह्मप्रको क्षेत्र करें १९९४</mark>कि राज स्थार प्राथकार में मार्च में सीचे कियर स्थितिक मार्च के स्थार के स्थार से का स्थार के स्थार

ARTICLES OF AGREEMENT between the Board of Trustees of the Party of the First Part, hereinafter called the University, and the result of the Party of the First Part, hereinafter called the University, and the result of the Party of the First Part, hereinafter called the University, and the result of the Party of the

(Enter here hame and address of second party to this agreement, using corporate or other leval

nye) Talifarithy Luning their empleyment in this arresny aren and chail in all respects do t bloot to the tules and regulagen of other the Tulversity govorning cied members and employees

Party of the Second Part, hereinafter called the Sponsor, for a cooperative investigation described as follows:

the investigation to be carried out by the University in the Department(s) of:

one of its research agencies, under the terms and conditions specified herein.

parang ay kalanggan kanggang langganggan na mala ak matalah dibang diban

្រាស់ ស្គ្រាស់ ស្គ្

(1) This agreement is executed for the following period:

et deux die 1905 and al die finklagek je 190k i

with the understanding that it may be extended for additional periods under the same terms or such other terms as may be mutually agreed upon; provided that the Sponsor shall request such extension in writing not less than thirty (30) days before this original agreement expires. The University reserves the right to decline to extend this agreement beyond the expiration date if the scientific or scholarly results realized or reasonably anticipated do not in the judgment of its officials warrant continuation of the program.

- (2) The conduct of the investigation shall be under the full control of the University which will supervise and direct all experimental work and the computation and reduction of all results obtained, together with the placing of these data into form for presentation.
- (3) The University will furnish the necessary space for this investigation, together with heat, light, power, and water. In addition, it will permit the use of such laboratory apparatus and experimental facilities as it may possess which are not in use for other purposes. It is agreed, however, that apparatus, equipment, and other facilities not available in the laboratories of the University, and all materials and supplies required in the investigation, shall be purchased from and charged against the funds for this investigation provided by the Sponsor.

(9) The Sponsor agrees to pay the University the sum of investigation, such payments to be according to the following schedule:

to cover the expenses of this

The second secon

	400	15			15	
(All checks should be drawn positioned should be sent to the Colleges of	Bursar Maria	emittance shou	For projects of For-	projects car	rried on ir	n tì
			•			**
T IS UNDERSTOOD AND AGREED onduct of the investigation by the Unistent with the nature of the work.						
					•	~
(-2) (-2)				ur .		2
(10) This agreement is subject to t	he applicable con	stitutional and	statutory provision	is of the St	ate of	
•						٠.
•						
••						
IN WITNESS WHEREOF, the auth	horized officers of	the respective	parties have hereun	to set their	hands and	d tl
sale of the nertice this		day of	19	to set their	hands and	d tl
sale of the nertice this		day of	parties have hereun , 19	to set their	hands and	d ti
sale of the nertice this		day of	19	to set their	hands and	d ti
eals of the parties, this		day of	19	to set their	hands and	d tì
eals of the parties, this		day of	19	to set their	hands and	d ti
eals of the parties, this	ate)	day of	(Month)  OF TRUSTEES OF TH		hands and	d tl
eals of the parties, this		day of	(Month) 19		hands and	d til
PPROVED FOR THE UNIVERSITY BY:  Head of Department	(Date)	THE BOARD PARTY OF THE	(Month)  OF TRUSTEES OF TH		hands and	d ti
PPROVED FOR THE UNIVERSITY BY:	ate)	day of	(Month)  OF TRUSTEES OF TH		hands and	d tl
PPROVED FOR THE UNIVERSITY BY:  Head of Department	(Date)	THE BOARD PARTY OF TO	OF TRUSTEES OF THE		hands and	d ti
PPROVED FOR THE UNIVERSITY BY:  Head of Department	(Date)	THE BOARD PARTY OF THE	OF TRUSTEES OF THE	ller	hands and	d ti
PPROVED FOR THE UNIVERSITY BY:  Head of Department  Dean or Director	(Date)	THE BOARD PARTY OF TO	OF TRUSTEES OF THE FIRST PART  Comptro	ller	hands and	d tl
PPROVED FOR THE UNIVERSITY BY:  Head of Department  Dean or Director	(Date)	THE BOARD PARTY OF TO	OF TRUSTEES OF THE FIRST PART  Comptro	ller	A A	d th
PPROVED FOR THE UNIVERSITY BY:  Head of Department  Dean or Director  Legal Counsel	(Date) (Date)	THE BOARD PARTY OF TO	OF TRUSTEES OF THE FIRST PART  Comptro	ller	B	d th
PPROVED FOR THE UNIVERSITY BY:  Head of Department  Dean or Director  Legal Counsel  Bursar/Business Manager	(Date) (Date) (Date)	THE BOARD PARTY OF TO	OF TRUSTEES OF THE FIRST PART  Comptro	ller	hands and	d tl
PPROVED FOR THE UNIVERSITY BY:  Head of Department  Dean or Director  Legal Counsel	(Date) (Date)	THE BOARD PARTY OF THE	OF TRUSTEES OF THE FIRST PART  Comptro	ller	B	d tl
Peals of the parties, this	(Date) (Date) (Date)	THE BOARD PARTY OF TO	OF TRUSTEES OF THE FIRST PART  Comptro	ller	hands and	d th

(4) All records of the investigation are to be the property of the University of the Sponsor. The original records shall be kept on file by the University, but copies of all such records shall be furnished the Sponsor or his duly authorized representative on request. The University shall have the exclusive right to publish at its discretion the results of the investigation in the form of a bulletin or bulletins, or otherwise. No account of a cooperative research project or reprints of scientific articles resulting from the investigation shall be published by the Sponsor or by any other agency, except upon approval of the division of the University or head of the department in which the work is being done.

Prior to such publication, no publicity shall be given to any of the results of the investigation except upon the recommendation or with the approval of the University and the Sponsor, unless the scientific value of a discovery made during the course of the investigation be such that, in the judgment of the University, the public interest requires prompt release or publication thereof. The publication, if any, shall contain a description of the investigation and a report of the results and conclusions; full credit shall be given the Sponsor and every person and agency having made

a significant contribution to the results obtained.

างไทย ได้ได้เดิดเลือดให้เดือดสมพัฒน์ พิทธานสมพัฒนา ( เดิว ให้นายสมพัฒนา

and the first and the first terminal and the first terminal for the first section of the firs

It is agreed that under no circumstances will the Soonsor state or imply in any publication or other published announcement that the University has tested or approved any manufactured product, manufactured, sold, or distributed under a specific brand, name, or trademark. It is also agreed by the Sponsor that it will not under any circumstances use the name of the University in any advertisement, whether with reference to the cooperative agreement or any other matter, without the prior approval of the University.

(5) Authorized representatives of the Sponsor shall at all times have access to the data secured and results computed from the investigation, subject, however, to the restrictions named in Article 4. The University will submit such reports of progress to the Sponsor as may seem desirable. An advisory committee may be named by the parties to consist of such persons and have such duties as may be mutually agreed upon.

(6) It is agreed that all results of experimental work of this investigation, including patentable discoveries, carried on under the direction of the scientific staff of the University, belong to the University and to the public and shall be used and controlled so as to produce the greatest benefits to the public.

It is agreed that if patentable discoveries grow out of the investigation and such discoveries have commercial value, the Sponsor, upon payment of the entire cost of securing a patent, shall be given free use of the patent as a non-exclusive licensee, it being agreed that other licensees shall pay the University a royalty which in the opinion of the University is fair to the Sponsor and to the public.

The Sponsor shall notify the University in writing whether it will pay the costs of filing an application and procuring a patent on any discoveries which may be patentable within sixty (60) days from the date when the University gives the Sponsor notice of any such discovery. In case the Sponsor does not wish to assume the expense of securing a patent, the University may, in its discretion, do so, and the Sponsor shall be given a non-exclusive license on substantially similar terms as other licensees.

- (7) All technical, clerical, and other personnel necessary for the effective prosecution of this investigation shall be employed by the University and paid from funds provided by the Sponsor. Such personnel shall be employees of the University during their employment in this investigation and shall in all respects be subject to the rules and regulations of the University governing staff members and employees.



RISIZES Enphany	<u>44</u>				
date of Origina Authorisation		fice &:- terded to		Accest of Unitrating	
4 may 55	Tyen		5-2502-12-801	the same of the sa	
				(8000.00-	3/2455)
				· ·	
		L			
William)	Period	Star Fr	327 Abray S	Asent of	
Renifosizaceuk	Carraged	polited to		Oligania	
author =	1-14-	Auly 52	6-2502-10-001	16,864.64	
		V		Way Market Market Control	
				-	\$ 100 mg
	The second responsible to the second	122		A <sup>7</sup>	
				and the British Mr. 14 by 1 house the fact that	
				•	
	2000				ing in the second s The second secon
			1124	13.10	
2	9/11/55	112431	0		
_2	guly 16	2621.3	4 1124	310	
7_10	Seft 56	11,243.1	10:		
$-2-\beta/$	400 1138	16,864.69	1 11999		
					1247
			_		10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
				13	MAN S
		A CONTRACTOR OF THE PARTY OF TH	A STATE OF STREET, STR		18 / X
		4	-	4	- 1 <sub>N</sub>
	-,5				
3.2				<u></u>	
-RA08:		1,0360 118 1,0360 118			
				L	
引着海					
第二人类 级。					4