



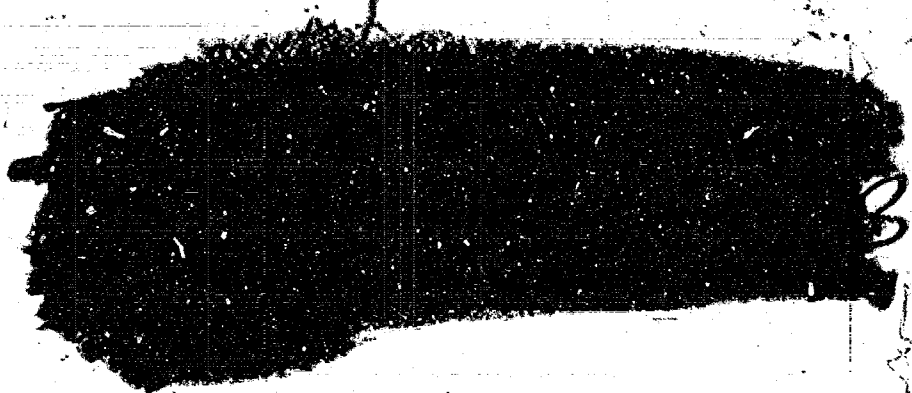
THE BLACK VAULT

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86-1



Grant for :

Financial Statement
June 30, 1958 to July 1, 1959

Funds received

43,052.00

Expenditures :

Wages & salaries	18,864.68
Equipment	194.14
Supplies	422.52
Subjects, testing	800.00
Overhead	<u>2,839.38</u>
Apparatus (# 3 units)	<u>19,990.00</u>

Total expenditures :

43,110.72

Balance July 1, 1959 (Deficit)

(\$ 58.72)

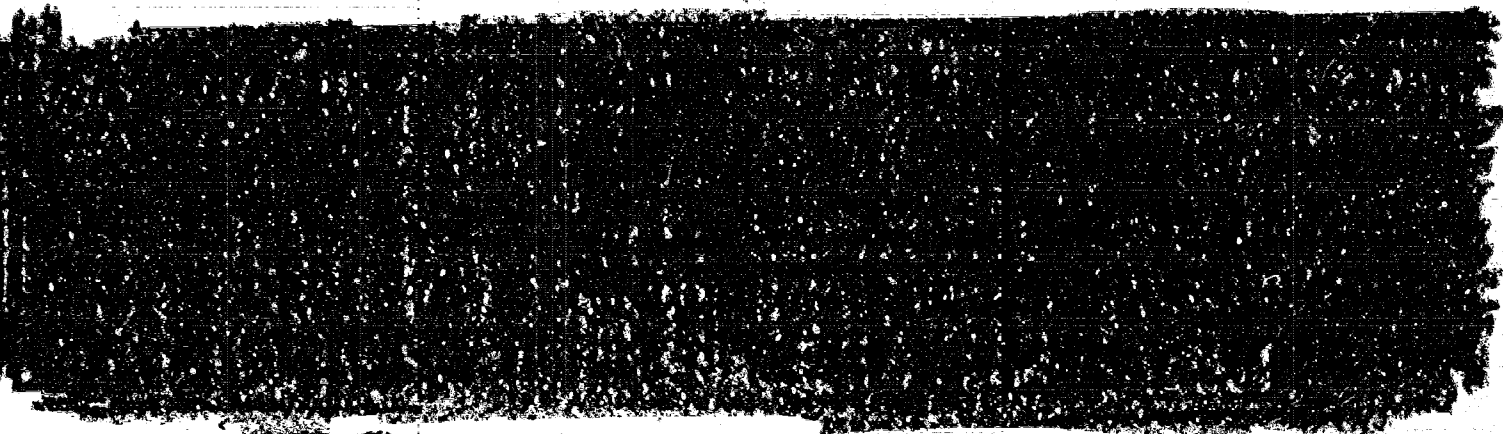
I hereby certify and verify that the submitted figures are correct.



Accountant

10/2/59

July 2, 1959



B

Proposal

B-2

C



PHYSIOLOGICAL RESPONSE RECORDER

Prepared for:

Dr.



C

August 15, 1958

Prepared by:

B



B-2

Scope: This proposal covers the design, development and fabrication of three direct writing three channel recorders displaying respectively:

1. pressure changes induced in a pneumatic cuff wrapped around the upper arm of a primate.
2. chest expansion movements detected by a rugged transducer strapped around the chest with a slip-proof buckle.
3. skin resistance changes detected by an electrode device furnished by the purchaser.

Specifications, General: The unit will be portable, weighing approximately 30 lbs., and will be housed in a handsome fibreglass unbreakable carrying case providing storage for accessories. Ball point pens will be used. Overall dimensions of case will be approximately 9 x 14 x 15 inches. Power required will be 115 volts 60 cycles. Quality of materials and workmanship will be in accordance with best practices.

Specifications, Detail:

Chart Paper: 3 separate grids will be used on a single roll of paper. Identifying nomenclature will appear upon each grid. Each grid will be a minimum of 2 inches wide. 100 rolls will be supplied.

Chart Speed: Fixed, 6 inches per minute.

Controls: Adequate controls and calibration means will be provided in accordance with good engineering design.

Operating Instructions; Maintenance and operating instructions will be provided.

Construction: Chassis will be readily removable and accessible. Front panel will have louvered air vents and will be held in place by magnetic fasteners.

Delivery: One single channel unit, complete with case and transducers, operating in accordance with the above specifications will be delivered within 33 days from the contract award. This first model will be returned to ~~the~~ upon delivery of the first of three recorders within 45 days from the contract award. Delivery of the remaining two recorders will be effected within 90 days.

B

B

August 8, 1958

86-3

Dr. [REDACTED]

C

Dear Dr. [REDACTED]

C

PROPOSAL

Three (3) Biological Response Recorders with 3 pen single chart drive and a speed of 6" per minute complete with pen motors, pen and chart paper rolls.

Total price.....\$19,940.00

Terms: \$7,000.00 cash with order. Balance on acceptance of delivery of the 3 complete units. Terms less 1% with payment on delivery.

Delivery: One workable single channel instrument which will demonstrate and prove the principle of these units within 45 days after receipt of order. Complete order within 45 to 90 days after receipt of order.

Very truly yours,

B [REDACTED]

General Manager

C

Enc.
CC to [REDACTED]

C

C

TO

Dr.

YOUR INQUIRY NO. Verbal *86-4*

DATE OF INQUIRY 9-16-58

DATE RECEIVED 9-16-58

TERMS: 30 DAYS NET, 1% 10 DAYS.

Ann. Dr.

Via:

ITEM	CATALOG NO.	DESCRIPTION	QUANTITY	UNIT PRICE	EXTENSION
1	Special	PLASTIC MOLDED HAND ELECTRODE ASSEMBLY, For <i>[redacted]</i> Physiological Response Recorder, Prototype models only, With leads and connectors	13 ea.	Lot	\$ 50.00

PRICES SUBJECT TO CHANGE 30 days after date of this bid DATE September 22, 1958

SHIPMENTS WILL BE MADE F.O.B. Destination

SHIPPING CHARGES WILL BE COLLECT OR PREPAID. (PLEASE *[redacted]* YOUR PREFERENCE ON YOUR ORDER.)

ORDER WILL BE SHIPPED TO *[redacted]* VIA Our Truck

SHIPMENT WILL BE MADE At time of delivery of *[redacted]* Recorders AFTER RECEIPT OF YOUR ORDER.

PLEASE STATE WHETHER TAXABLE OR NONTAXABLE *[redacted]*

THANK YOU

86-5

1 July 1958

[REDACTED]

B

Gentlemen:

We are pleased to be able to transmit to you the following funds:

Check [REDACTED] drawn on [REDACTED] for \$42,052.00

Check [REDACTED] drawn on [REDACTED] for \$1,682.08.

These funds represent a contribution for the use of your directors in carrying out the very worthwhile research goals of your organization.

Yours truly,

86-6

[REDACTED]

Date of report: 20 June 1958

Phase II Polygraph equipment

and procedure [REDACTED] by Dr. [REDACTED]

B

C

Satisfactory

20 June 1959

Dr. [REDACTED]

A

76-8

17 June 1958

MEMORANDUM FOR: CONTROLLER

ATTENTION : Finance Division

SUBJECT : MOUTRA, Subproject 86

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 memoranda, Subproject 86 has been approved and \$43,734.00 of the over-all MOUTRA project funds has been obligated to cover the subproject's expenses. This obligation of funds should be charged to Allotment 8-2502-10-001.

A [Redacted Signature]

Chief
TSS/Chemical Division

APPROVED FOR OBLIGATION OF FUNDS:

[Redacted Signature] A

Research Director

I CERTIFY THAT FUNDS ARE AVAILABLE;
 OBLIGATION REFERENCE No. 2681
 CHARGE TO ALLOTMENT No. 8-2502-10-001

20 JUN 1958

[Redacted Signature] A

AUTHORIZING OFFICER

Date: 20 JUN 1958

Distribution:

Orig & 2 - Addressee

1 - TSS/OC

1 - TSS/PASB

1 - TSS/ [Redacted] G

2 - TSS/CD

B-9

20 June 1958

MEMORANDUM FOR: CHIEF, FINANCE DIVISION

VIA : TSS/Budget Officer

SUBJECT : MULTRA, Subproject 86, Invoice No. 1,
Allotment 8-2502-10-001

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

Cashier's check in the amount of \$42,052.00,
drawn on a [redacted] bank, payable to [redacted]

Cashier's check in the amount of \$1,682.08,
drawn on a [redacted] bank, payable to [redacted]

2. Please forward the checks to Chief, TSS/Chemical Division, through TSS/Budget Officer, no later than Monday, 30 June 1958.

3. This invoice represents the total amount currently authorized under Subproject 86. However, since it is anticipated that additional funds will be obligated for this project, the files should not be closed.

CHECK RECEIVED 27 1958

THE AMOUNT OF \$43,734.08

Chief
TSS/Chemical Division

Attachments:
Invoice and Certifications

RECEIVED 27 JUL 1958 THE AMOUNT OF \$43,734.08

Distribution:
Orig & 2 - Addressee

Dr 888 002661
Cr Cash

100.1
256240-501 : 17.2

43,734.08

43,734.08

15 June 58

A

105

B-9

INVOICE

For services

\$43,734.08

[REDACTED]

CERTIFICATIONS

(1) It is hereby certified that this is Invoice No. 1 applying to Subproject 86 of MAULTRA, that performance 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

Date:

(2) It is hereby certified that this invoice applies to Subproject 86 of MAULTRA which was fully 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:

86-10

DRAFT
17 June 1958

MEMORANDUM FOR: THE RECORD

SUBJECT : MKULTRA Subproject 86

1. The purpose of Subproject 86 is to provide funds to the Department of Medicine, Neurology Division, [redacted] School of Medicine [redacted] to support Phase II of the research program on polygraph equipment and procedures undertaken by TSS/CD for the Office of Security. (B)

2. The first phase of this program involved the design of a miniature recording unit applicable to the sensing units now in use by Office of Security and which produces a record identical with that now produced by the [redacted] machine. The present phase will entail building two of the [redacted] machines and subjecting them to the necessary biological and physical evaluation required to bring them to the prototype stage. At the same time, personnel of the project will continue as during Phase I to perform feasibility and background work aimed at Phase III of the program. Phase III is the final part of the program and envisions the production of an [redacted] which will also incorporate more reliable estimates of the stress reaction in human beings if any such parameters can be found.

[redacted]

3. Dr. [REDACTED] Associate Clinical Professor of Medicine (Neurology) will monitor and direct and actively participate in this project as principal investigator within the School of Medicine, [REDACTED] B

4. The cost of this program for a period of one year is estimated at \$42,052.00. To this sum must be added \$1,682.08 representing a four percent service charge to the [REDACTED] B

B [REDACTED] making the total amount \$43,734.08. The Foundation will function as cutout and cover for this grant. The cover title of the project is [REDACTED]

C [REDACTED] presumably being supported by a research grant from the [REDACTED] B

5. The total cost of the project for a period of one year will not exceed \$43,734.08. Charges should be made against Allotment 8-2502-10-001.

6. The [REDACTED] has requested the University to submit a summary accounting of monies received and to return any unexpended grant funds at the end of the project year.

7. Title to any permanent equipment purchased by funds granted to the University shall be retained by them in lieu of higher overhead rates.

8. 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.

9. The requirement for a six months' informal accounting on the part of the principal investigator is waived.

10. Dr. [redacted] is cleared through TOP SECRET and is aware of the true purposes of the program. Also, he has agreed to comply with the requirements of the Memorandum of Agreement.

A [redacted]

Chief
TSS/Chemical Division

APPROVED FOR OBLIGATION OF FUNDS:

[redacted] A
Research Director

Date: June 20, 1958

Attachment:
Research Proposal

Distribution:
Original only

88-11

[REDACTED]

B

[REDACTED]

B

[REDACTED]

B

[REDACTED]

C

25 April 1958

Gentlemen :

We are desirous of receiving support in broadening certain aspects of our present activities in the screening and evaluating of new tranquilizers within the Neurophysiological Laboratories, Department of Neurology, [REDACTED] University School of Medicine, [REDACTED]

B

B

The scope of the research program is outlined in the attached research proposal. Our laboratories have been equipped, staffed and actively engaged in neurophysiological research for a considerable period of time. As a nucleus for the present proposal, the laboratory is already equipped with an 8 channel Grass Model polygraph, 3 EEGs, and a Meditron EMG.

It is our proposal to conduct investigations along the following lines in order to produce a simple, rapid, and objective test for screening and evaluating new "tranquilizers".

H

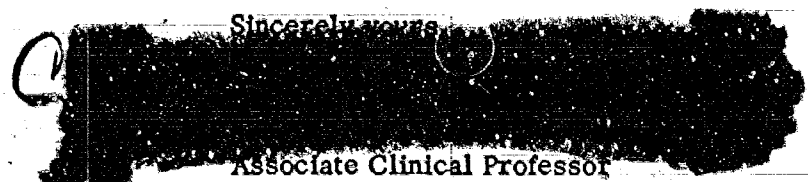
1. Design, engineer and construct two (2) prototype [REDACTED] polygraphs with their inherent advantages.
2. Evaluate and standardize the prototypes on random and select populations.
3. Compare the efficacy of the prototypes vs existing polygraphs in measuring physiological responses in man quantitatively.
4. Determine the degree of variation and the extent of accuracy between the prototypes and our present screening techniques.

86-11

The following is the proposed yearly budget :

Neurophysiologist (MD) 1/2 time	8,000.00
Fellow in neurophysiology (PhD) full time	7,500.00
Technician, laboratory (1/2 time)	2,000.00
Technician, electronic (1/3 time)	1,700.00
Subjects, clinical testing	600.00
Total salaries and wages	19,800.00
University overhead 14%	2,352.00
Sub total	22,152.00
Equipment and apparatus (incl 2 prototypes)	19,200.00
Supplies and expendables	700.00
Total	42,052.00

In view of the fact that departmental requirements and budgetary allowances must be submitted by June 30, 1958 for the next academic year, an early reply by you will be greatly appreciated.

Sincerely yours,

Associate Clinical Professor

 C

[REDACTED]

86-12

B

[REDACTED] H

May 26, 1958

[REDACTED] H

This is a request for a supplement of one thousand dollars (\$1,000) to be added to the grant assigned to [REDACTED]

An additional supplement of the above amount would obtain three prototype polygraphs instead of two. In view of the fact that the construction of the three units total \$ 19,990. 00, whereas the cost of two units is relatively the same; it is definitely to our advantage to have an additional unit made.

Your immediate attention to the above request will be extremely helpful in finalizing our terms with the manufacturer.

Thank you

[REDACTED]

Executive Secretary - Treasurer

[REDACTED]

8 May 1957

86-13

MEMORANDUM FOR: THE RECORD

SUBJECT: Discussion with Mr. [REDACTED] of the Office of the General Counsel

1. On 7 May 1957, I had a discussion with Mr. [REDACTED] of the General Counsel's Office about whether or not my acting as a consultant for the Agency after my resignation and receiving compensation for professional services rendered in that capacity would in any way be a violation of any of the so-called conflict-of-interests statutes. Mr. [REDACTED] stated that he could not see how such activity on my part would be a violation of the conflict-of-interest statutes in any way.

[REDACTED]
TSS/Chemical Division/Br. II

Distribution:

Orig & 2 - TSS/CD

TSS/CD [REDACTED] (8 May 1957)

86-14

MEMORANDUM FOR: THE RECORD

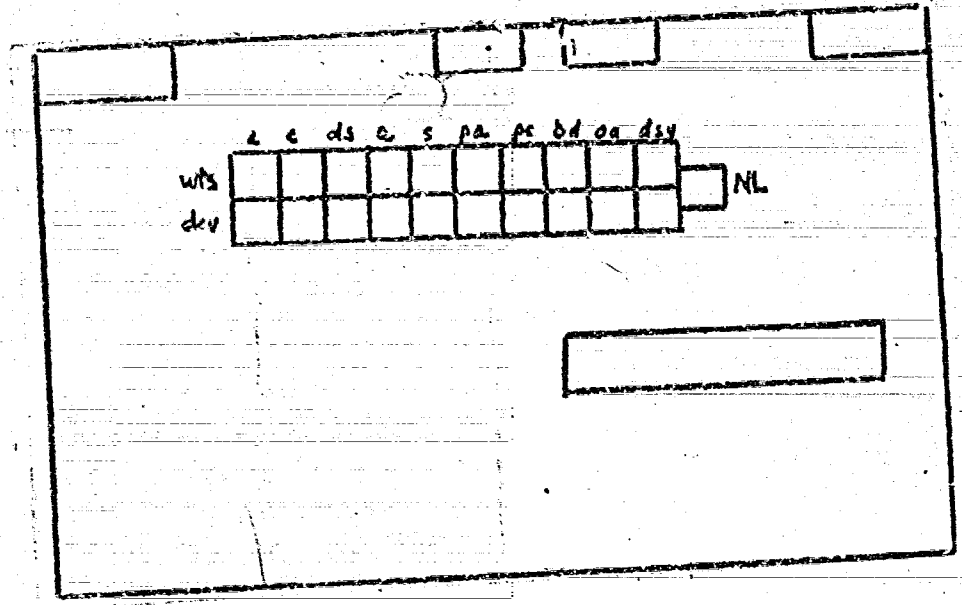
SUBJECT: Authorization To [REDACTED] (B)

(B) 1. Reference request from [REDACTED] (B) 22 May 1958.

2. Authorization requested above referenced letter granted by telephone, 30 May 1958.

(A) [REDACTED]

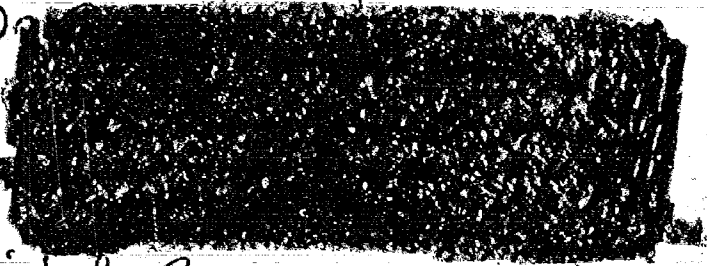
86-15



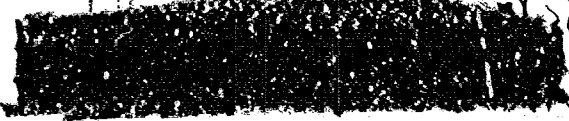
86-16

Dr

C



Asst Clinical Prof of Surgery in



C

#86

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B

B

B-17

May 22, 1958

H

Dear

H.

In view of the fact that [redacted] University School of Medicine is [redacted] B from [redacted] to [redacted] in the first part of the coming year, there will be a great limitation of space and curtailment of activities in all departments. Moreover, with the consolidation of administrative personnel and sections, the question of security and cover becomes a great problem.

With the above hindrances, it would be more advantageous and simpler to place the research project [redacted] C with [redacted] The use of outside laboratory facilities has been accepted by the University.

With your concurrence, the project for the development of a [redacted] H polygraph will be withdrawn from [redacted] B University School of Medicine and assigned to [redacted] B

The results from this project should fulfill the requirements specified by you. (Phase I)

Sincerely yours,

[redacted signature]

Executive Secretary - Treasurer

[redacted]

JB

JB-18

PROPOSAL

A considerable amount of planning and designing has been expended by the undersigned on specific problems in Branch II, TSS/CD.

In order to maintain a continuity of direction and effort, it is therefore proposed that the services of the undersigned be utilized on a continuing basis in the following areas:

- A. Plan, monitor, and direct research and development of a ^H [redacted] polygraph.
- B. Design new and more refined physiological measurements for the detection of deception (e.g. infra-red irradiations, voice harmonics analysis).
- C. Consolidate all pertinent and available information for the preparation of an [redacted] 4
- D. Monitor, direct and/or actively participate, from the standpoint of TSS/CD, in the research conducted within Subprojects No. 56 and No. 72.
- E. At the specific request of TSS/CD, Dr. ^C [redacted] will evaluate the reliability and validity of proposed and completed research projects.
- F. Compile literature surveys on specific problems at the request of TSS/CD.
- G. Report on general scientific and medical meetings attended.
- H. Act as medical consultant, and whenever feasible and mutually agreeable, actively participate in TSS/CD operations and support functions.

Arrangements have been made for the appointment of the undersigned as an Assistant Clinical Professor of Medicine, Neurology Division, [redacted] University School of Medicine, [redacted]

B

B

B-18

The following is an estimate of funds needed to cover the program outlined above for a period of one year:

Professional services	6,000.00
Secretarial services	2,500.00
Consultant fees	500.00
Supplies, expendable	600.00

\$9,600.00

A [REDACTED]

[REDACTED]

B

86-19

B

25 April 1958

Dear

The attached proposed research project, [redacted] is in response to your current requirements for a [redacted] polygraph that is used in the detection of deception.

Specifications for the polygraph will be in accordance with those suggested in the attached memorandum entitled [redacted] Polygraph.

Due to the necessity and standpoint of cover, the true purpose of the research proposal was submerged in academic and medical terminology and form.

I hope that this proposal will fulfill one of your many pressing requirements.

Sincerely yours,

[redacted signature]
Executive Secretary - Treasurer

[redacted]
C

86-20

B [REDACTED]

[REDACTED] B [REDACTED]

PROJECT: [REDACTED] C

INTRODUCTION :

Today, anxiety and stress are recognized as a concomitant part of every day living. Simply for the sake of discussion, and well recognizing the existing dispute over the meaning of anxiety, we can consider anxiety as essentially a human function because it is associated with the capacity of delayed action, choice of action, self reflection of motivation, and the capacity for projection of the self into the future. The concept of stress revolves around the arousal of anxiety. In general, anxiety can be aroused by any condition which threatens the integrity of the organism. Therefore, any stimulus may in principle arouse an anxiety response because of the particular meaning of threat it may have acquired for the particular individual involved. However, we can distinguish a class of stimuli which is more likely to produce a disturbance in most individuals; the term "stress" can be applied to this class of conditions.

Recently, there has appeared a group of drugs known as "tranquillizers" that have established their efficacy in the treatment of anxiety and stress problems. The term "tranquillizers" is an attempt to describe the peculiar type of sedative and hypnotic effects evoked by the administration of these drugs, which differ from those produced by known substances such as barbiturates with their heavy central inhibitory activity. Characteristically, these "tranquillizers" produce hypotension with bradycardia, hypothermia, respiratory inhibition, and a reduction of activity of the sympathetic regulating centers.

Chemical syntheses have produced such an alarming abundance of these new medications that accurate clinical appraisals become a physical impossibility from the sheer force of numbers. A simple, rapid, objective test that will demonstrate in man a pharmacological effect confirmatory of animal experiments and that will evaluate the comparative effectiveness and safety of the new drug when used in place of accepted medications is certainly indicated.

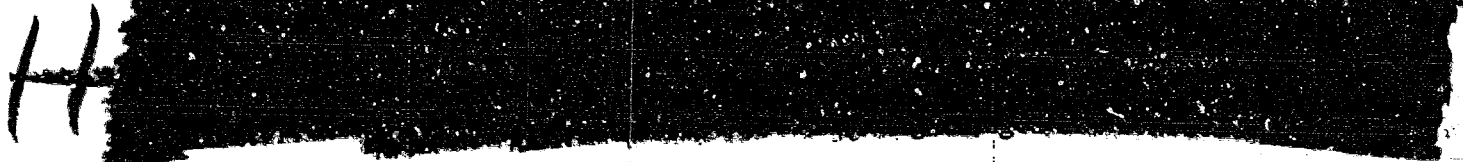
86-20

PROPOSAL :

Therefore, it is our proposal to conduct investigations along the following lines in order to produce a simple, rapid, and objective test for screening and evaluating new "tranquillizers" :

1. Design, engineer and construct two (2) prototype ~~polygraphs~~^H polygraphs with their inherent advantages.
2. Evaluate and standardize the prototypes on random and select populations.
3. Compare the efficacy of the prototypes vs existing polygraphs in measuring physiological responses in man quantitatively.
4. Determine the degree of variation and the extent of accuracy between the prototypes and our present screening techniques.

The above proposal is only an attempt to answer a pressing need. It must be kept in mind that there is still an existing necessity to furnish better sensitivity and reliability in quantitating physiological responses in man. Definitive steps can be taken to modify and refine the present methods of physiological measurements, e. g.



86-70

MINATURE POLYGRAPH

There exists within the Agency a continuing requirement from the Division of Security for improvements and refinements of the current instrumentation used in the detection of deception. In addition, new and better methods for measuring changes in emotional stress are sought.

Currently, the [redacted] Polygraph is utilized by Security [redacted]. The instrument is of such a nature that the successful use of it is almost negated by its inherent weaknesses and faults. Revisions and refinements of the present instrument are critically and urgently needed. The following proposal is an attempt to meet this urgent need and is based on the various criticisms and suggestions of the polygraph operators in the field. Therefore, this project is designed to answer some of the current operational problems.

PROPOSAL : It is therefore proposed to

- a. [redacted] the existing [redacted] Polygraph by transistorizing all components and utilizing printed circuits for all wiring.
- b. Incorporate a new recording system of [redacted] in place of the existing ink writers.
- c. Repackage the [redacted] components into one or two units, effectively disguised as items of normal use, e.g. radios, traveling bags, etc.

The advantages to be gained by the new model are :

- a. [redacted] for light weight and easy portability.
- b. Capable of withstanding use and abuse due to ruggedness and compactness.
- c. Ease of disguise and concealment [redacted]
- d. No loss of evaluative procedure due to identical tracings.
- e. Minimize wearing parts
- f. Simplification of function to minimize operator errors, carelessness, and instrument failure.

BB-20

- g. Minimize the failure of expendable components to offset "chain reaction" failures.
- h. Ease of field repairs through captive screws, plug-in assemblies and components, removeable panels and accessible check points.
- i. Easy assembly, adjustment, disassembly, maintenance and repair.
- j. Built in calibration with automatic standardization.
- k. Permanent operating instructions attached to the instrument.

The above proposal is only an attempt to answer a pressing need. It must be kept in mind that there is still an existing necessity to furnish better sensitivity and reliability in quantitating physiological responses in man.

Definitive steps can be taken to modify and refine the present methods of physiological measurements, e.g. utilizing a [redacted] in lieu of the cumbersome pneumatic chest tube; and utilizing a [redacted] in place of the sphygmograph.

Furthermore, many provocative suggestions have been raised that warrant investigation, e.g. [redacted]

86-21

MEMORANDUM FOR : THE RECORD

SUBJECT : Establishing and substantiating the "bona fides" of agent and/or staff personnel through techniques and methods other than interrogation.

1. BACKGROUND :

The life blood of intelligence is information. Collection of information is the most characteristic activity of the entire intelligence business. Accordingly, an intelligence organization cannot exist until it does a broad and systematic job of collecting. But in this very task lie methodological problems which are so tough as to be almost insolvable and in their unsolved state are a perpetual source of inefficiency.

A certain important fraction of the knowledge which intelligence must produce is collected through highly developed secret techniques. Herein begins perhaps the major methodological problem of the collection stage of the intelligence process.

It begins with the compartmentation of the clandestine services. This compartmentation is dictated by the established necessity of secrecy. An absolute minimum of people must know "anything" about the operation, and the greatest amount of caution and dissimulation must attend its every move. But unless the clandestine services watch sharply it can become its own worst enemy. For if it allows the mechanisms of security to cut off from some of the most significant lines of guidance, it destroys its own reason for existence.

With a high wall of impenetrable secrecy, it is constantly in danger of collecting the wrong information and not collecting the right. This danger is intensified by the very way the clandestine services operate. It involves highly complicated "tradecraft" techniques, clandestine agent recruitment and handling, nets and sub-nets, security and reliability of communications, and so on. Isolated by the security barrier, the perfecting of these techniques sometimes threatens to become an end in itself.

To concern ourselves with a specific problem, then, how can the "bona fides" of an agent or staff individual be established? Today, because of rapid changes and reassignments of our overseas case officers and the continuing operations of agents [redacted] for long periods of time, the paramount question arises upon the exfiltration of the agent(s). Is the agent "bona fide"; is he the same person we started with?

88-21

#

Worst yet, as we know [redacted] has the existing net, especially those [redacted] been penetrated and a penetration agent substituted for our original agent?

Any means by which we can increase to the maximum degree the element of identification will in turn enhance the acceptability and reliability of the information obtained.

2. IMPLEMENTATION

In order to increase the maximum degree of identification, the following techniques and methods are suggested:

A. Polygraph

On a current basis, the polygraph is used extensively in attempts to establish "bona fides." The problems of utilizing the polygraph, especially in overseas areas, are numerous. In an effort to refine and improve the present polygraphic techniques, a three phase research program is proposed.

1. Minaturize and repackage the existing polygraphic equipment to gain the advantages of compactness, lightness, better concealment, simplicity of operation and maintenance, and ruggedness. (see attached proposal)
2. Modify and refine the present methods of physiological measurements. e.g. utilizing a small strain gage in lieu of the cumbersome pneumatic tube; utilizing a optical or impedance type plethysmograph in place of the sphygmograph.
3. Detecting and developing new and better measurements of emotional stress. e.g. infra-red, voice harmonics, myelograph

B. Ideal biographic file

A systematic and methodical compleat of data that will render maximum support in cases of questioned identity.

1. Dactylography or finger printing has been universally accepted and proven. However, in clandestine operations, it is at times impossible to obtain finger print specimens for future reference.
2. Anthropometry or Bertillon's system of identification is based on the descriptive data and exact physical measurements of the human body. However, the chief disadvantage lies in the inaccuracies of measurements produced by human error.

Ancillary to the above is the "protrait parle" a method for the scientific indexing and filing of the descriptions of certain facial characteristics of individuals.

86-21

3. Blood groupings. The fact of belonging to a definite blood group is a fixed character of every human being and can be altered neither by the lapse of time, transfusion, nor by intercurrent disease. From the presence of other factors in the blood, e.g. Rh and Rh sub types, the degree of accuracy in identification is greatly increased. It must be remembered, however, that blood groupings can only positively exclude, but cannot positively identify.

4. Group specific substances in the organs, body fluids and saliva. The principles involved are essentially those pertaining to the blood groups.

Mendelian Law of inheritance and derivation of offspring holds true for group specific substances (para 3 and 4 above) On this basis then, screening and identification of displaced persons, immigrants and line crossers claiming familial relationships and direct lineage can be greatly expedited.

C. Artificial means of establishing positive identification :

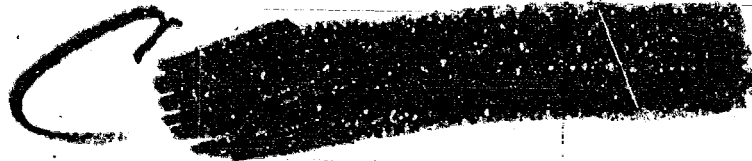
1. Radio-isotopes, with predetermined half lives, can be selectively implanted and/or injected.

2. Radiologically opaque foreign bodies selectively implanted and/or injected into predetermined sites in the human body.

3. Specific circulating antibodies artificially produced by selective antigen sensitization that are alien to the habitat in question.

3. CONCLUSION

It appears that with the development of more specialized and refined methods and techniques of identification, the substantiation and establishment of "bona fides" can be greatly improved. If properly utilized, these methods and techniques represent a tremendous asset to the Intelligence Community as a whole. Keeping in mind the considerations of priority, time, financial support and availability of qualified personnel, a definitive program of research should be implemented.



B-22

~~XXXXXXXXXX~~

16

DATE	DESCRIPTION	AMOUNT	BALANCE
17 June 1958	W/P	1,834.10	4,373.08

DATE	DESCRIPTION	AMOUNT	BALANCE

DATE	DESCRIPTION	AMOUNT	BALANCE
1	Refund	4,373.08	0

NOTICE: Check ~~XXXXXXXXXX~~ before mailing checks.

G ~~XXXXXXXXXX~~