C00149537

A/B 5 342/4

TO: Chief, Technical Branch O/S.O.

FROM: CSI/Medicine

A

SUBJECT: Report on Special Trip authorized by Memo of 13 Oct. 1954.

As directed, at least 10 professional contacts were made during the time of 18-29 October 1954. Every contact made, by great good fortune, through agency preparation and whole-hearted cooperation of all concerned, had most gratifying results. One of the desired substances collected has a commercial value of over 600 dollars, the other a production value of over 1000 dollars. Others are rare items, commercially not obtainable, all secured without expense to this agency. In addition valuable data and files were collected, as well as specimens from outstanding collections for further study and guidance. The personal contacts with field agents, executives, and scientists, old friends and acquaintances, some covertly, laid a promising foundation for further joint action.

I. Contact with [redacted] through him with the officers and staff members of [redacted]

A. - Dolitrone

[redacted] has recently proven the value of dolitrone, judging from results in over 20 cases. He gives dolitrone a definite place in the new era of anesthesiology, designating it as analgesic rather than as an anesthetic, as a border-line agent, since it keeps the patient at least partially conscious. It makes the entire system insensible to pain, in contrast to a local anesthetic, leaving the patient able to obey instructions from the doctor and retaining the ability to use the muscles. While it causes forgetfulness the blood circulation rate is not greatly slowed, oral surgery is possible with less bleeding and depression as well as deep anesthesia are only obtained after very large doses. Dolitrone has been used successfully alone or in combination with other drugs, such as curare, succinyl chloride, cocaine, nitrous oxide and ether, (see detailed data on table attached) in dental, eye, ear, nose and throat surgery, and in bronchioscopy, causing in contrast to pentothal no spasms. It has given extended and prolonged relief from pain in advanced cancer and in hemorrhoid removal. Its use in childbirth is in progress. For detailed clinical results see Table I attached.

Methods of Administration

1. Oral Use: Extended experiments are planned after completion in the laboratories of studies to improve the physical properties of dolitrone such as suspension or solution, removal of odor and adjustment to the desirable pH.

2. Intramuscular Injection: The acute stinging pain, lasting about 2 minutes, may be overcome by the simultaneous or preceding injection of a local anesthetic such as procaine. The raising of the arm above the horizontal level, in case injections are made in the arm, are also recommended to forestall pain and temporary swelling.

3. Intravenous Injection: The use of the greatly improved lyophilized dolitrone preparation, white, odorless powder, staying in 2% aqueous solution for about 3-4 hours, at a pH of 4.5, given intermittently by vein, as necessary, is recommended. Fortunately this lyophilized preparation is also now available for the experiments planned by the agency, through the cooperation of and Mr.

Pharmacological and Toxicological Studies

The value of dolitrone as an intravenous anesthetic is also indicated in animal experiments. According to staff members of the , the acute LD50 for the sodium salt of dolitrone is approximately 3 times that of thiopental. While minimal hypnotic doses for these 2 anesthetics are similar, the duration of hypnosis is more than doubled, being 53 minutes for dolitrone and only 20 minutes for thiopental in single 60% ID 50 doses. No cumulation was observed with repeated intravenous dosing at regular frequent intervals in rabbits, using dolitrone, and in dogs this cumulation was minimal. In contrast, using thiopental with an identical procedure, the duration of hypnosis in rabbits and dogs becomes longer with each succeeding dose. Signs of toxicity, as measured by hematology, body weight and gross and microscopic pathology, did not occur in dogs which were maintained in deep surgical anesthesia for two 90-minute periods. There was no appreciable change in blood pressure in dogs receiving repeated rapid intravenous injections of dolitrone, until doses were given which were large enough to cause respiratory paralysis.

Chemistry

Dolitrone is the registered name for the chemical compound:

5-ethyl-5-phenyl-m-thiazane-2-4-dione

with

B. Seeming Death Agent: Xenon

For purposes of very fast effects of anesthesization, without too great a risk of fatality resulting from its use, suggests the consideration of

the inert gas xenon. Upon his advice we are contacting [redacted] for further information. Of interest in this connection is that according to the Russian R. [illegible] Madorskaya, publishing his results in the Soviet Physiological Journal, xenon, even at normal atmospheric pressure, has a narcotic effect 7 times stronger than that of krypton. Xenon is a heavy, colorless gaseous element, and represents one of the inert gases, occurring both in the atmosphere - part in 170 millions by volume - and in gases from hot springs. Originally obtained by fractionated distillation of crude argon from the air, it can be condensed to a liquid, boiling at 108-109.1 C., and to a solid, melting at 111.5 (or at 1400 C., according to Webster's Dictionary).

C. Stress and Strain Research: Neratran

[redacted], have also developed a new compound, alpha-(2-piperidyl) benzhydrol hydrochloride for use in narcolepsy, in emotional fatigue and depression, amphetamine-like in action, but according to claims, not as toxic nor habit-forming, causing little or no insomnia, and no rebound letdown, through the cooperation of [redacted]

This substance is available to the agency in ample amount (without cost to us) for testing. The company expects to extend its work of stress research into aging and diseases of old age in its new "laboratory of basic medical science".

D. Personnel of [redacted]

The executives and staff members contacted were [redacted]

[redacted] in wooden unit dolitrons was developed. [redacted] susceptible to SO a[redacted] of these gentlemen, I believe, would be glad to cooperate with this agency.

E. Psychotherapeutic [redacted]

Suggested [redacted] as a very capable contact for psychotherapeutical and psychiatric problems.

B/3

[illegible] staff members [illegible]

In the conference with [illegible] the section chief of solvent preparations, the following problems were discussed:

1. The final total synthesis of LS (Lysergic acid) and of Ergonovine. This had [illegible] been accomplished and was subsequently published [illegible] (see copy attached). The synthesis of LS resulting from years of group research, requires such a complex procedure that kilo and larger stockpile quantities cannot be expected for the present. No attempt is now contemplated to use biosynthetic methods for the possible simplification of the process in the [illegible] laboratories. The synthesis of ergonovine [illegible] useful agent in facilitating child birth and treatment of migraine, was also made possible by the conversion of the di-lysergic acid to di-isolysergic acid hydrazid, [illegible] reconversion to ergonovine, which last step had previously been [illegible] by [illegible] (See autostat copy attached).

2. Many lysergic acid derivatives have been prepared in the bio-chemistry department headed by [illegible] and are available to us for further study. One of these, the lysergic acid morpholate, is being studied by [illegible], who offered to inform us, when results are available.

3. Corn Smut (Huitlacoche Mexico). The use of corn smut, recognized in Mexico as a medicine, and used to overcome apprehension and fear in parturiens behind the iron curtain and in China, was discussed with the suggestion that further data concerning its chemistry might be made available to this agency. The presence of ergot-like alkaloids has been reported in Chilean literature, and more recently studied in this field are carried on in the [illegible] under the direction of [illegible]. Dr. Irick show further info is expected through cooperation with [illegible]

4. Although the presence of ergot-like alkaloids in this Florida mushroom had been reported in Chilean literature was also discussed. This report has not been [illegible] through [illegible] and we [illegible], through [illegible], have expressed interest in securing specimens for further study and requested our help in this cooperative research.

5. A fast acting sedative with anesthetic properties. Kilo such substance, faster acting than ether with anesthetic and hypnotic properties, was suggested. However, the development of selection of such special substances was discussed, including possibly barbiturates, which might be volatile and readily volatilized. They might then be dispersed or inhaled through their vapor and effective through their vapor. There was a definite response to the possible use of drugged cigarettes, suggested by [illegible] and adopted in the use of asthma cigarettes, containing the leaf of Datura stramonium, and in the administration of Metrol (tetrahydrocannabinol). This latter use had been reported by [illegible]

A

B/6

B/3

[illegible] in
[illegible] as a Secret document. In the petrol cigarettes the
preparation or its alcohol solution was injected into the core at one or both
ends of the cigarette was sufficient, the effect was noted within 15-20 minutes.
4. Non-habit forming Sedative. The preparation and distribution of a new
and sedative and hypnotic, comparatives non toxic in acute and chronic use, and
apparently not habit forming, is now under way. It is either identical with or
similar to the German "Doloontal" (ethinyl-cyclohexyl-allophanate), developed
in West Germany by Chemische Werke, Rheinpreussen (of Gruenthal). The des-
cription of new sedatives, unsaturated alcohols methylpentinol, methylbutinol,
methylpentenol, ethynilcyclohexanol and their esters is reported in "Arzneimittel
Forschung," Vol. 4, 477-479, 1954.
7. Cooperative research. Since the management [illegible] has been ever
willing to cooperate with the Government, never accepting compensation and in
fact offering to contribute a large sum to Government research, no difficulty
was envisioned by the staff members consulted in initiating special research
projects along the lines suggested. It was suggested to make the contact through
[illegible]
8. Personnel. [illegible] the personnel of the company secured for
secret or top secret projects of this agency include [illegible]
and possibly [illegible] other staff
members cleared for top secret [illegible]

[illegible] and others. In addition there are [illegible] members of the
[illegible] employed, one of them [illegible] The background of these members is
[illegible] which
[illegible] attached here.

[illegible] contact with [illegible]

[illegible] main topics discussed with [illegible] personally been to be also 1917, were his experiences and [illegible] with marijuana compounds [illegible] the synthesis of tetrahydrocannabinol, also called "pyrahexyl" or [illegible]

[illegible] no supplies on hand, but suggested [illegible] as a pure source. He had given some of the substance [illegible] for tests, who, however, reported conflicting results. Very helpful, he suggested would be the reading of the extensive Allentown [illegible] of Dr. Dorothy Cranbaugh on cannabis, and the recent work of Dr. [illegible], Associate Professor of Chemistry at Princeton University on [illegible] chemical and pharmacological properties. [illegible] (as to secure a supply of the tetrahydrocannabinol [illegible]

[illegible] as a complete list of his publications [illegible] which will be turned over to [illegible]. The results [illegible] as [illegible] the [illegible]

[illegible] with [illegible]

[illegible] a brief survey of his recent trip to Germany [illegible] Belgium, Holland, Germany, Switzerland, Italy and Spain. [illegible] the great developments in the manufacture of new pharmaceuticals and preparations. The most promising are now being introduced into this country and discussed, such as chlorpromazine, marketed by Smith, Kline and French as thorazine, Eli Lilly acquired the rights to market a new [illegible] tranquilizing sedative, developed by Merck, Sharpe and Dohme [illegible] and an antituberculosis drug, developed in [illegible] Denmark. The [illegible] all which A report, through [illegible]

[illegible] discussed his work and interests and showed the best [illegible] laboratories for pharmacological and pharmaceutical research and control. Through his wide contact with outstanding workers in the field of medicine in this country, and his familiarity with our needs and aims, he proposed, upon request, a number of promising contacts, such as:

[illegible]

[illegible] connected in a [illegible] fashion with [illegible]

[illegible], either known

[illegible] for the [illegible]

[illegible] of normal [illegible]

[illegible] found philopermanine were helpful, thus far that [illegible]

[illegible] and combined shock treatment, stating that by [illegible]

prolonged treatment, [illegible] to eight years old had been [illegible]

[illegible] his [illegible] cooperation, even change [illegible] in [illegible]

future program to be undertaken. While formerly [illegible] much [illegible]

[illegible] work, which caused him to suspect the lack of oxygen [illegible]

[illegible] the [illegible] of the effect of any chemicals on the mind, he [illegible]

[illegible] now [illegible] within in the solution of theoretical problems. The treatment [illegible]

[illegible] private patients precludes, [illegible]

[illegible] a copy

[illegible] which is attached.

[illegible] suggested that [illegible] be an outstanding man in his field, and [illegible]

[illegible] helpful, so, he in his opinion.

Contact with [illegible]

The following problems were discussed:

[illegible] Bearing death agent, causing acute anesthesia, without rapid death. [illegible] Questioned the usefulness of [illegible], suggested by [illegible], especially [illegible] physical properties, as a gas and the difficulty of handling [illegible] Suggested among the possibilities of [illegible] the purpose in mind. [illegible] mentioned the use of methyl chloroform, a liquid becoming solid at [illegible] and boiling at [illegible] atmospheric pressures. However, he admitted neither [illegible] other (including trichloroethanol, tribromethanol, trichloroethylene, [illegible] etc.) had actually been tested for the purpose as far as he knew and a selection [illegible] would, [illegible] important project.

2. Fugue Poisoning: The narcotic properties of nutmeg (nard of [illegible] fragrans) have been [illegible] He mentioned the [illegible] [illegible] relatively [illegible] causing depression, respiratory paralysis and stupor. [illegible] nutmeg is added as a spice to food and beverages (e.g. eggnog, etc.) [illegible] properties should be further studied. He doubted the effectiveness [illegible] could then be potentiated.

3. Mescal Buttons: He has been interested for a long time in [illegible] mescal buttons, from the native cactus, which plant he grows in his laboratory [illegible] hobby, and mescaline, which he does not consider a dangerous narcotic [illegible] He is aware that Mexican Indians use the native cactus [illegible] for mental effect, other than as hallucinants, and would be interested [illegible] such studies, if a project could be agreed upon.

4. Monkey Inhalation Studies: [illegible] follows his complete inhalation and [illegible] symptomology in his colony of over 100 rhesus monkeys. These he buys [illegible] from certain dealers at 35-40 dollars a piece, after they are clinicle-conditioned [illegible] in S. Carolina and freed from intestinal disease. He is not breeding them, but would be greatly interested in including gibbons and chimpanzees among his animal colony.

5. Monkey Behavior Study: [illegible] having observed the behavior pattern through daily observation, believes that in addition to the emotional symptoms of anger, jealousy, fear, anxiety and worry, the evidence of hallucination may be detected in monkeys, after administration of hallucinants. The work with more intelligent and gentle apes, in contrast to the vicious rhesus monkeys, such as the gibbons from Thailand, would therefore be a very attractive prospect, promising a valuable addition to our knowledge of testing.

psychogenic agents in humans. This exploratory guide would be particularly helpful if carried out with a bred strain of standardized gibbons. [illegible] would be much interested in this phase as well. My assistance in obtaining young gibbons for breeding and breeding directly from Thailand through closer acquaintance with key personnel in the Thai ports service and direction may be acceptable to the agency and the state department.

[illegible] exchange of patent agents [illegible] released from his stock of [illegible] without charge, a substantial [illegible] of mescaline of about 35 grams, quoted in the open market at 30 dollars a gram, representing in [illegible] a small amount [illegible] for exploratory testing.

[illegible] was greatly helped in his work by the assistance of [illegible] a biochemist, [illegible] help would also be available, if desirable, [illegible]

[illegible]

[illegible] Salicylates, including marijuana, the cannabis [illegible] substances like histamine and serotonin, etc. [illegible] the Thai-American cooperation and [illegible] the Thai [illegible]

[illegible]

[illegible] with copy in enclosure, I am [illegible] to provide, free of charge, [illegible] and conditions (possibilities of [illegible] hypnotics, hypnotics, [illegible] of [illegible] for further detailed consideration and experimental [illegible] the [illegible] security clearance for [illegible] the agent may venture in a responsible position in the [illegible] Professional Government Service and could readily qualify, according to data [illegible] and 2, [illegible] of pharmacological research, specialist in anesthetics, [illegible] therapeutics, hypnotics, anticonvulsants, toxicology, etc.

END

Contact with [illegible]

The following problems were discussed with [illegible] whose name has been [illegible] cleared. B/3

[illegible] The search for sanity, selected by the Company, as a special field of research and studies was discussed after briefing with reappraisal of accomplishments and further steps. [illegible]

[illegible] Thorazine (chlorpromazine hydr.), a phenothiazine derivative, developed by Rhone-Poulenc, Dr. [illegible], Paul and others in France. This has recently been introduced into this country as a new therapeutic agent with profound pharmacological activity. It depresses the function of certain neural centers. It is effective in the control of nausea and vomiting due to various causes. It has been used as a potentiating substance in [illegible] and prolonged anesthesia, and [illegible] physicians [illegible] reporting in the Annals [illegible] (May 1954) found that thorazine is highly effective in combating the acute mental and physical aberrations [illegible] associated with [illegible]

[illegible] Thorazine induces a [illegible] in which the patient could be [illegible] take the required [illegible] The drug apparently [illegible] advantages over [illegible]

[illegible] of this and other [illegible] agents on the liver requires further study in order to prevent damage and the development of [illegible] continued use.

[illegible] Personal [illegible] clinical pharmacologist [illegible]

[illegible] director of research [illegible]

Contact [illegible]

[illegible] known to me personally since 1914, had been engaged [illegible] He had also been director, for a lifetime, [illegible] He spent many years in exploration and collection in various parts of the world, including prolonged stays in the Philippines, where he is known in scientific circles. [illegible] His guidance was very helpful and his continued cooperation, if promised, may be expected. Through his help the extensive herbarium collection, now under the direction [illegible] has made [illegible]

available. Specimens could then be collected from various plants, analyzing
Oceania and Vanuatu, and the information then and there collected and by whom,
[illegible] offered to be helpful in contacting both experts and collectors
in the Philippines and other regions of the globe. [illegible] professor
of botany, also known to us personally for many years, offered his continued
assistance. Unfortunately, [illegible] occurred, the author's outstanding
[illegible] unfortunate, was [illegible] a prolonged illness [illegible] very helpful
[illegible] in cultivation and identification of [illegible] providing viable spores of certain
[illegible]

[illegible] through [illegible]
[illegible] cooperation [illegible]
[illegible] Vanuatu (Hebrides) also contains [illegible] French Polynesia, Wallis [illegible]
[illegible] reported to be lacking in the presence of alkaloids. We also requested
[illegible] Platycerium peregrinum, thus enabling us to compare the cost
[illegible] of Platycerium peregrinum with that prepared by extraction of the plant
[illegible] of preparing the synthetic product. With the requests approved, [illegible] the latter functioning as the executive,
[illegible] offered their cooperation in testing the gibbon in exploratory tests to establish
its usefulness in evaluating cerebral agents and in eventually establishing, if
justifiable, a colony of standardized gibbons through controlled breeding.

[illegible] Contact with Staff members of [illegible] and Collection of Desired Specimens.

The following problems were discussed generally with [illegible] and [illegible] and other staff members:

(b) The bean family and other genera of the Leguminosae were discussed, including Piptadenia species, furnishing the exciting "cohoba snuff", prepared from [illegible] seeds; these contain [illegible] the psychogenic bufotenin, [illegible] ... the collection of the seeds [illegible] in order to [illegible] larger amounts [illegible] through [illegible] As a result [illegible] the collection of [illegible] and [illegible] for study [illegible]

[illegible]

[illegible] Fungi [illegible] valuable [illegible] contact, as [illegible]

[illegible] familiar with certain South American sources of [illegible] and should be assured, if possible, for future assistance.

[illegible], Horticulturist [illegible] where he collects ornamental plants, he could be of further [illegible] secured.

Representative specimens were collected of various plants, including [illegible] Ormosia, Sophora and [illegible] and the information noted, when and where collected, in order to assist in subsequent surveys.

A/C 5,342/6

13 March 1953

A

My dear [illegible]

A

I am sending you this informal memorandum since my time is so limited before leaving off for [illegible] thought I would dash off a few notes [illegible] for your consideration and the record.

A

1. I am attaching a memorandum taken from [illegible] files. It is completely self-explanatory [illegible] I would have [illegible] with [illegible] the next time you [illegible] [illegible] rather up with him and [illegible] the [illegible] these lines. He may be a source of supply for [illegible]. You can use the letter in any way you think [illegible] would like to have it [illegible] with it. [illegible] signs the world letter is the subject of a [illegible] at the present time, I believe, by security and should not be approached or [illegible] in anything. Of interest also is the fact that [illegible] in this matter.

B/3

C

2. Please do what you can [illegible] to get together all the material [illegible] available. Particularly our [illegible] of his experimental work that he is now [illegible] reading [illegible] opinion, etc. etc. However, we should not be told that we are interested in his [illegible].

B/6

3. This is again to remind you that in the near future you may be called upon to procure relatively substantial amounts of Mescaline, LSD-25 and tetra-hydro-cannabinol. I do not know what amounts will be required but that information will probably come through [illegible] and also [illegible] will probably handle any necessary money involved in the transaction. [illegible] of course, is aware of this and aware of your ability as a procurer of rare items. I do not [illegible] again have to remind you that this type of transaction should be very deeply concealed since our interest in this must not be known.

A

4. Have you had the opportunity to secure any information on that drug called Delitrone that was apparently successfully used at [illegible] specialists [illegible] feels that that chemical would have particular [illegible] these lines and we should like to find out all details possible and also how can we obtain the chemical itself?

B/3

A

A/B, 5, 3+4/7

File

[illegible] October 1[illegible]

A

E

[illegible]

G

H-B/3

[illegible]

A

[illegible]

A

[illegible]

A

C00149537

Office Memorandum • UNITED STATES GOVERNMENT

A/B, 5, B442/C

To: Chief, Security Research Staff

Date: 11 Aug 1953

From: Chief, Technical Branch, SRS

Subject: Travel Approval, [redacted]

A

[redacted] has proposed a trip to [redacted] beginning 16 August 1953 and terminating 23 August 1953.

The purpose of this trip is to attend to the following matters in the order listed:

1. [redacted]

2. [redacted]

3. [redacted]

4. [redacted]

5. [redacted]

If approval is granted, please sign the attached form above and forward to the Chief, Administration & Training, in order that travel orders may be [redacted]

A