



MSI PATCH SHEET

Smith, Wilbert B  
Sarbacher, Robert



Sept. 15 - 1950

Notes on interview through L/C.  
Brenner with Dr. Robert J. Sarbacher.

WBS: I am doing some work on the collapse of the earth's magnetic field as a source of energy, and I think our work may have a bearing on the flying saucers.

PIS: What do you want to know.

WBS: I have read Scully's book on the saucers and would like to know how much of it is true.

PIS: The facts reported in the book are substantially correct.

WBS: Then the saucers do exist?

PIS: Yes. They exist.

WBS: Do they operate as Scully suggests, on magnetic principles?

RIS

We have not been able to duplicate their performance

WBS

Do they come from some other planet?

RIS

All we know is, we didn't make them, and it's pretty certain they didn't originate on the earth.

WBS

I understand the whole subject of Saucers is classified

RIS.

Yes, it is classified two points higher even than the H-bomb. In fact it is the most highly classified subject in the US Government at the present time.

WBS

May I ask the reason for the classification?

RIS

You may ask, but I can't tell you

was

2, there any way in which I can get more information, particularly as it might fit in with our own work.

P.B.

I suppose you could be cleared through your own Defense Department and I am pretty sure arrangements could be made to exchange information. If you have anything to contribute, we would be glad to talk it over, but I can't give you any more at the present time.

Note: The above is written out from memory following the interview. I have tried to keep it as nearly verbatim as possible.

~~TOP SECRET~~

CONFIDENTIAL

DEPARTMENT OF TRANSPORT  
INTRA-DEPARTMENTAL CORRESPONDENCE

OTTAWA, Ontario, November 21, 1950.

PLACE

DATE

YOUR FILE

SUBJECT

Geo-Magnetics

OUR FILE

(R.ST.)

MEMORANDUM TO THE CONTROLLER OF TELECOMMUNICATIONS:

For the past several years we have been engaged in the study of various aspects of radio wave propagation. The vagaries of this phenomenon have led us into the fields of aurora, cosmic radiation, atmospheric radio-activity and geo-magnetism. In the case of geo-magnetics our investigations have contributed little to our knowledge of radio wave propagation as yet, but nevertheless have indicated several avenues of investigation which may well be explored with profit. For example, we are on the track of a means whereby the potential energy of the earth's magnetic field may be abstracted and used.

On the basis of theoretical considerations a small and very crude experimental unit was constructed approximately a year ago and tested in our Standards Laboratory. The tests were essentially successful in that sufficient energy was abstracted from the earth's field to operate a voltmeter, approximately 50 milliwatts. Although this unit was far from being self-sustaining, it nevertheless demonstrated the soundness of the basic principles in a qualitative manner and provided useful data for the design of a better unit.

The design has now been completed for a unit which should be self-sustaining and in addition provide a small surplus of power. Such a unit, in addition to functioning as a 'pilot power plant' should be large enough to permit the study of the various reaction forces which are expected to develop.

We believe that we are on the track of something which may well prove to be the introduction to a new technology. The existence of a different technology is borne out by the investigations which are being carried on at the present time in relation to flying saucers.

While in Washington attending the NARR Conference, two books were released, one titled "Behind the Flying Saucer" by Frank Scully, and the other "The Flying Saucers are Real" by Donald Keyhoe. Both books dealt mostly with the sightings of unidentified objects and both books claim that flying objects were of extra-terrestrial origin and might well be space ships

from another planet. Scully claimed that the preliminary studies of one saucer which fell into the hands of the United States Government indicated that they operated on some hitherto unknown magnetic principles. It appeared to me that our own work in geo-magnetics might well be the linkage between our technology and the technology by which the saucers are designed and operated. If it is assumed that our geo-magnetic investigations are in the right direction, the theory of operation of the saucers becomes quite straightforward, with all observed features explained qualitatively and quantitatively.

I made discreet enquiries through the Canadian Embassy staff in Washington who were able to obtain for me the following information:

- a. The matter is the most highly classified subject in the United States Government, rating higher even than the H-bomb.
- b. Flying saucers exist.
- c. Their modus operandi is unknown but concentrated effort is being made by a small group headed by Doctor Vannevar Bush.
- d. The entire matter is considered by the United States authorities to be of tremendous significance.

I was further informed that the United States authorities are investigating along quite a number of lines which might possibly be related to the saucers such as mental phenomena and I gather that they are not doing too well since they indicated that if Canada is doing anything at all in geo-magnetics they would welcome a discussion with suitably accredited Canadians.

While I am not yet in a position to say that we have solved even the first problems in geo-magnetic energy release, I feel that the correlation between our basic theory and the available information on saucers checks too closely to be mere coincidence. It is my honest opinion that we are on the right track and are fairly close to at least some of the answers.

Mr. Wright, Defence Research Board liaison officer at the Canadian Embassy in Washington, was extremely anxious for me to get in touch with Doctor Solandt, Chairman of the Defence Research Board, to discuss with him future investigations along the line of geo-magnetic energy release.

I do not feel that we have as yet sufficient data to place before Defence Research Board which would enable a program to be initiated within that organization, but I do feel that further research is necessary and I would prefer to see it done within the frame work of our own organization with, of course, full co-operation and exchange of information with other interested bodies.

I discussed this matter fully with Doctor Solandt, Chairman of Defence Research Board, on November 20th and placed before him as much information as I have been able to gather to date. Doctor Solandt agreed that work on geo-magnetic energy should go forward as rapidly as possible and offered full co-operation of his Board in providing laboratory facilities, acquisition of necessary items of equipment, and specialized personnel for incidental work in the project. I indicated to Doctor Solandt that we would prefer to keep the project within the Department of Transport for the time being until we have obtained sufficient information to permit a complete assessment of the value of the work.

It is therefore recommended that a PROJECT be set up within the frame work of this Section to study this problem and that the work be carried on a part time basis until such time as sufficient tangible results can be seen to warrant more definitive action. Cost of the program in its initial stages are expected to be less than a few hundred dollars and can be carried by our Radio Standards Lab appropriation.

Attached hereto is a draft of terms of reference for such a project which, if authorized, will enable us to proceed with this research work within our own organization.

*D.M.A.*

*W.B. Smith*

(W.B. Smith)  
Senior Radio Engineer

*Concurrence*

*26/11/50*

WBS/CC

*OK*

*goals - but it's kept me posted from time to time*

*time to time*

*G.D.P. Edwards*

*1/12/50*

PROJECT MAGNETPURPOSE

This project is for the purpose of studying magnetic phenomena, particularly those phenomena resulting from unusual boundary conditions in the basic electromagnetic theory. There is reason to believe that such phenomena exist and that their discovery will open up a new and useful technology.

ORGANIZATION

The initial organization shall be as small as practical and composed of personnel who are used to working together, including so far as possible a variety of research abilities. Laboratory facilities are to be drawn from existing facilities so far as possible. Overall responsibility for the project shall rest with the engineer-in-charge, who shall delegate such responsibility to subordinates as may be required to carry out the project.

PROGRAM

The initial program shall include the following avenues of investigations, to which others may be added from time to time as may appear expedient.

1. Theoretical study of electromagnetic radiation assuming boundary conditions different from those upon which the conventional theory was developed. ✓
2. Laboratory study of the mechanical forces associated with electron drift and electric currents in metallic masses. ✓
3. Theoretical and laboratory study of magnetic domain resonance conditions in magnetic materials. ✓
4. Investigation of the propagation of magnetic wave motion in magnetic materials. ✓
5. Investigate the possibility of producing, in effect, a "sink" in a magnetic field. ✓
6. Investigate the possibility of producing, in effect, single isolated magnetic poles. ✓
7. Investigate the effects of a magnetic field on a rotating curvilinear metallic object. ✓



COORDINATION

Full coordination is to be maintained, within security regulations, with other groups working on parallel or associated problems. Project reports will be available on a classified basis to suitably accredited groups or individuals.

SECURITY

As in the case with most fields of research, it is impossible to assess the results in advance which may be obtained through this project. However, there exist certain suspicions that the lesser known and little explored aspects of magnetism may hold the key to a new and significant technology. Consequently, it is intended to classify this work in its entirety until such time as it can be assessed for its impact on our civilization.

MS/yc

# 15932

cc: MINISTER  
DEI  
C. Douglas  
ADMS  
EXTRA  
DGTR  
ADMSP  
DGSTA  
DRD  
CR

CR

5010-4 (DGTR)

500 Slater Street  
Journel North Building  
Ottawa, Ontario  
K1A 0G8

March 31, 1978

Mr. Arthur Bray  
1157 Agincourt Road  
Ottawa, Ontario  
K2C 2S8

Dear Mr. Bray:

Thank you for your letter of February 6, 1978  
addressed to the Honourable Jeanne Sauvé.

The Department of Communications does not have  
a file 6650-4 called "Project Magnet". However, we were  
able to determine that the late Mr. W.B. Smith's (of the  
Department of Transport) material on "Project Magnet" may  
be available from the Planetary Sciences Section of the  
National Research Council. You may wish to write to this  
unit which is a part of the Herzberg Institute of Astro-  
physics.

We also understand that the only stipulation in  
viewing this material is that individuals are required to  
sign a statement to the effect that they will not release  
the names of any of the people mentioned in the material  
regarding U.F.O. sightings.

I hope this information will be of some help  
to you.

Yours very truly,

W.A. ...

(for) Dr. John deMercado  
Director General  
Telecommunication  
Regulatory Service

Sig. DGTR

Inform. \_\_\_\_\_

Apprv'l \_\_\_\_\_  
Approb. \_\_\_\_\_

Prep. by DRD

Prép. par \_\_\_\_\_

Apprv'd by \_\_\_\_\_

Appr. par \_\_\_\_\_

Copy: Dr. A.G. McNamara, N.R.C.

Action

DGTRS

DGSTA

SECURITY - CLASSIFICATION - DE SECURITE
OUR FILE - N. REFERENCE
YOUR FILE - V. REFERENCE
DATE 28 March 1978

Request for Access to Files on UFOs

Attached is the request, to which I referred in our telecon of March 23, from Arthur Bray of Ottawa for release of files, originally transferred from DOT, on "Project Magnet". Since you are currently reviewing the two files involved (Confidential file No. 6650-4 and its unclassified companion No. 5010-4), it was agreed that you would prepare the reply to Bray's request, with copy to me and ADNSP, and co-ordinate with other Branches as appropriate.

*B.C. Blevis*

B.C. Blevis

Attach.

c.c. A. Casey-Stahmer

DOTR

MAR 30 1978

RECEIVED

OTTAWA, Ontario, November 24, 1950.

MEMORANDUM TO DOCTOR O.M. SOLANDT:

I am returning herewith the draft article by Major Keyhoe, together with a proposed revision of the first five pages and a letter to Major Keyhoe.

I would suggest that the article, as revised, be scrutinized by others in the group and any amendments which they may suggest to be incorporated in the revision. I am quite sure that Major Keyhoe will accept the revised material in the same spirit in which it is offered and furthermore that the publication of this material, if permitted by the United States Research and Development Board, would be in the public interest.

← Note  
JTF

(W.B. Smith)  
Senior Radio Engineer

Air Services  
Telecommunications Division

OTTAWA, Ontario, November 24, 1950.

Dear Major Keyhoe:

The draft of your proposed article in True Magazine was referred to me through our Embassy in Washington. I certainly appreciate your willingness to let us see this advance document and comment upon it.

I feel, however, that the presentation might cause considerable embarrassment to the Canadian Government since they would be required to make some sort of official statement shortly after the release of the article which they are not, at the present time, in a position to do.

I have no objection whatsoever to the publication of the actual information contained in your article but I would much prefer that it be presented as an engineering opinion rather than the product of a definite project. I am sure you will appreciate this viewpoint since, as you know, our investigations have not progressed to the point where we can say conscientiously that we know the answers.

I have taken the liberty of redrafting the first five pages of your article to the asterisk marked at the top of page six. I sincerely hope that you will accept this suggestion in the spirit in which it is offered.

Yours truly,

(W.B. Smith)  
Senior Radio Engineer

DRAFT OF PROPOSED REVISION OF "TRUE" ARTICLE ON  
FLYING SAUCERS.

A group of Canadian scientists has been working for some time on certain problems connected with the earth's magnetic field. These investigations appear to point the way to a new technology in magnetics, and if the initial conclusions are correct, they offer a ready-made explanation for many of the striking features which have been reported in connection with the sightings of flying saucers. The basic premise is that it is possible to produce a magnetic "sink" within the earth's field; that is, a region into which the magnetic flux will flow at a controlled rate, giving up some of its potential energy in the process. Such a sink would have many interesting properties, such as the following;

1. Electrical power could be obtained from the collapse of the earth's magnetic field into the sink.
2. Powerful reaction forces could be developed in a conducting ring surrounding the sink and off-set from it, sufficient to support a suitably designed ship and to propel it.
3. If the rate of flow of magnetic flux is modulated the resulting magnetic disturbance

could be used for communication purposes.

It is curious to note that most of the descriptions of flying saucers are in accordance with the design which would be necessary to exploit the properties of a magnetic sink. For example, the saucers are described as consisting of a large circular disc, slightly dished, with a small central cabin. In this case, the sink could be located in the upper central part of the cabin, and the collapsing field in cutting through the surrounding metallic ring would induce in it an electric current which would react with the magnetic field which induced it, producing a force which would have a substantial vertical component. Support and propulsion of the ship would then be a combination of this resultant force, the airfoil action of the disc, and the interaction between eddy currents induced in the disc by its rotation and the main field.

Rotation of the disc may be either deliberate, for the induction of eddy currents or may be incidentally caused by the electron drag of the very large current circulating around the disc. In any case, there is good observational evidence that the disc appears to rotate.

Since the lift on the saucer will be proportional to the product of the earth's magnetic field and the field produced by the current induced in the disc, it follows

that when the saucer is accelerating upwards, a greater force is required and hence a greater circulating current. If the circulating current is sufficiently large and the cooling of the disc is inadequate, it may become red or even white hot, which is in line with several reported observations. Also, under certain conditions of operation a very high voltage may be built up between the center and rim of the disc, which could result in a corona discharge through the surrounding air if the saucer were at a sufficiently high altitude. Such a discharge would resemble the northern lights but would be very much more intense. This also seems to be confirmed by observations.

Navigation of such a flying saucer would be a very complex process indeed. In the first place the earth's magnetic field makes all sorts of angles with the horizontal, depending upon geographical latitude, and upon peculiar local conditions. Thus, the direction of the force which results from the interaction of the earth's field and the field of the disc may be in almost any direction. Furthermore, the tilt of the saucer to get the reaction force in the wanted direction most probably will result in aerodynamic forces in some other direction. Navigation therefore would resolve into a determination of the field direction, comparison with the direction in which it is



desired to move, and an analysis of the aerodynamic forces which would result from such a motion, and a suitable correction in the initial tilt of the saucer and flow of magnetic flux. It is doubtful if a human pilot could manage to do all this at the speed which would be necessary to manoeuvre a saucer at the speeds and through the intricate motions which have been observed. It is therefore highly probable that the saucer control systems are semi if not fully automatic, and most likely a push button effort.

There are many reports of saucers hovering in one spot for some time. For a saucer designed to operate as described, this would probably be its easiest manoeuvre, as it would be necessary merely to adjust the flux flow and tilt until the resultant force exactly balanced the weight of the saucer. There would be little or no aerodynamic problem in this case.

The only sound which would be expected from such a saucer would be a swish as of any object passing swiftly through the air, plus any incidental noises which might originate with the internal machinery of the saucer. There would be no roar of engine exhaust or jets, or beat of propellers, or other noises usually associated with aircraft.

It would be quite possible for a saucer such as has been described to leave vapour trails if it happened to pass through a region of supersaturated air, with a sufficient voltage on the disc to produce a corona discharge. The ions produced by the discharge would form nuclei for the condensation of droplets of water or crystals of frost, and the path of the saucer would be marked by the resulting visible cloud.

There is no indication that the accelerations to which a saucer crew would be subjected would be any different from the accelerations experienced in any other type of aircraft going through the same manoeuvres. Those authorities who have been consulted say that even Einstein's Unified Field Theory does not indicate that gravity can be neutralized or the inertia of matter overcome. Where saucers have been observed to execute close turns and other manoeuvres which would result in large accelerations, it is most probable that such saucers are remotely controlled and do not contain living matter as we know it.

Air Services  
Telecommunications Division

SECRET

OTTAWA, Ontario, January 3, 1951.

Dear Gordon:

I would like to bring you up to date in our magnetic program and also request from you any information which you have been able to obtain along these lines since we last discussed the matter.

We have three engineers working full time on the program, together with two technicians, with concentrated effort on the magnetic sink. Progress is, of necessity, slow because of the physical labour involved in making the various set-ups and measurements necessary.

Full co-operation is being given by Defence Research Board and National Research Council although at this stage in the work there is not a great deal that they can do beyond assisting in some of the machine work and providing materials and instruments. The holiday season of course made quite a hole in our program as no one felt inclined to put forth a maximum effort at that time.

I understand that Doctor Solandt was in Washington for sometime recently but I have not had a chance to speak to him since he returned. I do not think that he uncovered anything of significance or he would have passed the information along to us. It is possible that Mr. Wright may be able to add something.

Incidentally, our program is now official within the Department of Transport and is known as Project Magnet. It is classified as secret until such time as we know where we stand. Doctor Solandt has requested that we respect fully the United States classification on these matters.

Doctor Solandt referred Donald Keyhoe's draft article to me for comment. I took extreme exception to the first portion of the article which dealt with material which we had discussed, and in order to preserve our position I took the liberty of redrafting the first part of this article.

I returned the article with the revision to Doctor Solandt together with a letter to Keyhoe explaining my action. I also asked Doctor Solandt to show the article revision and letter to the others in our group for their comments and any further revisions which they might consider in Canadian interests.

I have heard nothing further in regard to the Keyhoe article and I was wondering if you could throw any light on the subject. I imagine that it has long since been returned to the Canadian Embassy in Washington after which I understand Keyhoe was to take it to Doctor Bush for clearance. I do not know what Doctor Bush's reaction will be to the material contained in the major portion of the article and my revision, but his reaction should certainly be interesting and I would like you to have a talk with Keyhoe sometime at your convenience to ascertain this point.

I trust that you had a completely satisfactory Yuletide season and kept up the tradition of Canadians in Washington.

Yours sincerely,

(W.B. Smith)

Note: Bush  
was Chmn. of Res. & Dev. Bd.  
STF



**SECRET**

1746 Massachusetts Avenue, N.W.,  
Washington 6, D. C.

January 6, 1951

Dear Wilbert,

Thank you for your letter of January 3. I was glad to hear how well you were progressing with arrangements for Project Magnet and I hope that this will give you ample opportunity to proceed with your research.

*deceased*  
There is very little more that can be done here for the present. The official position is still that nobody knows anything about the matter here at all. We are, of course, keeping our ears and eyes open and if anything does develop you will probably hear through the Wright and Solandt channel. On the Ambassador's instructions no one in the Embassy, apart from Wright and myself, is to discuss the matter with anyone.

I shall be glad, of course, to act as a post office and I think it would be useful to keep this channel open.

*deceased*  
*STF*  
I have not yet had an opportunity to meet Keyhoe but I can easily do so through Bremner and I will make an exploratory contact in the near future. I did not see his article after it was referred to you. I can appreciate your annoyance with the first two or

... 2.

W.D. Smith, Esq.,  
Air Services,  
Telecommunications Division,  
Department of Transport,  
Ottawa, Canada.

- 2 -

three paragraphs. The article was returned to Keyhoe through Wright and he has not seen it since nor has he heard anything from Bush or what Bush did. I may be able to get something more on this angle after seeing Keyhoe.

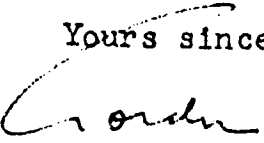
Is it possible to get "True" in Canada or should I send you a copy when and if the article comes out?

The Ambassador and I would be particularly interested in any indication you may have heard when you were here on the possibility of an official U.S. Government statement. It is this political angle with which I will be principally concerned. Anything you can do to help in this respect will be welcome.

There are a number of matters which I would like to discuss with you and if I manage to get up to Ottawa anytime in the next month or so I will make a point of getting in touch with you.

Thanks very much for your Christmas card. I hope that your celebrations were as alcoholic as ours.

Yours sincerely,

  
Gordon E. Cox.

- Deceased  
per Call to  
External Affairs  
83-1-11 JTF

TOP SECRET

2

*C.P. Aug 7 Dept. of Transport*

Mr. Edwards should write to the Dept of National defence Ottawa

requesting that clearance may be obtained for Mr. W. B. Smith to visit

the appropriate Service in the United States to discuss the use of Terrestrial magnetic forces in relation to ~~hydro~~hydrodynamic problems associated with saucer shaped objects .

In the covering request, the Department of transport should relate in as much detail as possible the objects of this study and also detail the work which has been carried out in the Geophysical field in Canada

Information unofficially obtained from Dr. Robert I Sarbacher , dean of the Graduate school, Georgia University

*N.B.!*

*Rec'd by JTF  
Nov. 24, 1982  
from Arthur Bray.*

Air Services  
Telecommunications Division

OTTAWA, Ontario, January 15, 1952.

Dear Arnould:

Further to our discussion in Washington in December, I have given the matter considerable thought and feel that it would not be wise to discuss our activities with American scientists until we have had an opportunity to have them discussed thoroughly within an entirely Canadian group.

I expected to have a report on our activities in the hands of Doctor Solandt before our next visit to Washington but for one reason or another, mostly great activity in the Section, I have not been able to get the report in shape. We expect to be in Washington during the week of January 21st and it looks as though the report will have to wait until sometime after I get back.

I shall, however, bring with me to Washington some of the data and my draft report so that you can see at first hand what we have been doing. I am sure that you will agree that it would be premature to discuss these matters with nationals of another country before we have them cleared by our own people.

With kindest personal regards.

Yours very truly,

(W.B. Smith)

*- Deceased,*  
Doctor Arnould Wright,  
Defence Research Board Liaison Officer,  
Canadian Embassy,  
Washington, D.C.





CANADIAN JOINT STAFF

PERSONAL

OFFICE OF DEFENCE RESEARCH MEMBER  
1746 MASSACHUSETTS AVE, N.W.  
WASHINGTON, D.C.

18 January 1952

Dr. Wilbur B. Smith,  
Air Services,  
Telecommunications Division,  
Department of Transport,  
Ottawa, Canada.

Dear Dr. Smith:

Thank you for your letter dated  
15 January 1952.

Discussions of your findings with  
American scientists will, of course, not be  
had until you give the green light.

I hope during the week of January  
21st you may have time to visit us, and  
perhaps have lunch with me one day.

Kindest personal regards,

Yours sincerely,

(A.L. Wright)  
Defence Research Member.

104-11-51 (56-2913)

CONFIDENTIAL

OTTAWA, Ontario, April 18, 1952.

## Unidentified Objects

22-12-29 (R.B.M.)

1. A study of some of the traces taken at our Ionosphere Stations indicates that reflections have been obtained from conducting objects approximately overhead. From the character of the traces it is concluded that these may be associated with the so called Flying Saucer phenomena and all stations are requested to keep a sharp lookout for unidentified aerial objects.

2. Any trace not conforming with the general established pattern should be regarded with suspicion and the sky promptly scrutinized for any visible object which might be responsible.

3. Where magnetic records or cosmic ray records are available they should be inspected immediately to see if any obvious correlation exists.

4. In the event of an actual sighting, the following information should be carefully noted:

- a) General shape of the object.
- b) Luminosity or brilliance and colour.
- c) Maximum dimension as compared with the dimension of some object such as a pencil held at arm's length.
- d) Approximate bearing, and angle above horizon when first sighted.
- e) Approximate bearing of path.
- f) Accompanying or delayed sound if any.
- g) Approximate time (in seconds) taken to travel through a certain arc (approximate degrees).
- h) Exact date, time and weather conditions.

5. If at all possible the Ionospheric recorder should be put on continuous sweep throughout the period of the sighting so as to obtain distance data.

6. Reports should be sent to Headquarters as promptly as possible with an advance message by radio advising of the incident.

Original Signed by

F. G. NIXON

(G.O.W. Browne)

Controller of Telecommunications.

Mr. W.D. McLeod,  
Officer-in-Charge,  
Baker Lake Ionosphere Station,  
H.P.O. 1015,  
Fort Churchill, Manitoba.

*W.D. McLeod*

OTTAWA, Ontario, April 19, 1952

## Unidentified Aerial Objects

22-12-29 (R.B.M.)

CONFIDENTIAL

1. There has been reported a number of recent sightings of unidentified aerial objects and there is reason to believe that the number of such sightings will increase over the next month or so.
2. In collaboration with the Defence Research Board it is planned to make a thorough study of all sightings reported in an effort to identify these objects, their source and purpose, and the assistance of your Division is solicited in keeping a sharp lookout for unidentified aerial objects.
3. It would be appreciated greatly if you would instruct your weather observers to note carefully and submit to this office the following information on any unidentified aerial object which they may sight:
  - a) General shape of the object.
  - b) Luminosity or brilliance and colour.
  - c) Maximum dimension as compared with the dimension of some object such as a pencil held at arm's length.
  - d) Approximate bearing, and angle above horizon when first sighted.
  - e) Approximate bearing of path.
  - f) Accompanying or delayed sound if any.
  - g) Approximate time (in seconds) taken to travel through a certain arc (approximate degrees).
  - h) Exact date, time and weather conditions.

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Mr. Andrew Thomson,  
Controller of Meteorological Services,  
Department of Transport,  
315 Bloor Street West,  
Toronto, Ontario.

107788  
22

Mr. Andrew Thomson

April 19, 1952

4. In view of the fact that many of your observers use theodolites, it would be further appreciated if these observers could make accurate measurements on any objects sighted, noting at the same time the behaviour of the compass needle. What we particularly wish to obtain is data from which the exact size, shape and altitude of such objects can be calculated. We also wish to know what speeds they attain and measurements towards this end would be appreciated greatly.

Original Signed by

*G. C. W. Browne*

(G.C.W. Browne)

Controller of Telecommunications.



CONFIDENTIAL

SECRET FILE SEC.  
DEPARTMENT OF TRANSPORT  
INTRA-DEPARTMENTAL CORRESPONDENCE  
APR 28 1952  
22-12-29  
Transport Dept.

2629 21

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2-50

OTTAWA, Ontario, April 25, 1952.

PLACE

DATE

YOUR FILE

SUBJECT

Unidentified Aerial Objects

OUR FILE

22-12-29 (R.B.M.)

1. There has been reported a number of recent sightings of unidentified aerial objects and there is reason to believe that the number of such sightings may increase over the next month or so.
2. The Defence Research Board have established a committee for the purpose of making a thorough study of all sightings reported in an effort to identify these objects, their source and purpose. Since the Department of Transport operate a large number of field agencies this Department is represented on the committee by an officer of this Division who will undertake the collecting and cataloguing of data on any sightings by observers in the Department.
3. In view of the fact that Marine Services are responsible for the operation of such establishments as light houses, etc. where a lookout is normally kept, it is felt that such observers might be in a favourable position to note characteristic data pertaining to any unidentified aerial object which might come within their view.
4. It would be appreciated greatly if you would instruct appropriate establishments to note carefully and submit to this office the following information on any unidentified aerial object which they may sight:
  - a) General shape of the object.
  - b) Luminosity or brilliance and colour.
  - c) Maximum dimension as compared with the dimension of some object such as a pencil held at arm's length.
  - d) Approximate bearing, and angle above horizon when first sighted.
  - e) Approximate bearing of path.
  - f) Accompanying or delayed sound if any.
  - g) Approximate time (in seconds) taken to travel through a certain arc (approximate degrees).
  - h) Exact date, time and weather conditions.

Mr. H.V. Anderson,  
Director of Marine Services,  
Department of Transport,  
Hunter Building,  
Ottawa, Ontario.

..... 2

CONFIDENTIAL

DRBS

DEFENCE RESEARCH BOARD

Ottawa, Ontario  
28 April, 1952.

TO: Distribution:

1. Herewith for your information and retention are the Minutes of the Meeting to discuss "Flying Saucers" Sighting of the 22 April, 1952.
2. Please sign receipt below and return to Room 4502 "A" Building, Defence Research Board.

*H. C. Oatway*  
H. C. Oatway  
Secretary.

Distribution

Dr. O.M. Solandt	-- D.R.B.
S/L L.P.S. Bing	J.I.S.
F/L V.L. Bradley	D.R.B.
Col. G.M. Carrie	D.R.B.
G/C D.M. Edwards	D.A.I.
Mr. A.J. Langley	D.R.B.
Dr. P.M. Millman	Dom. Observ.
Cdr. J.C. Pratt	D.N.I.
Mr. W.B. Smith	D.O.T.
Lt. Col. E.H. Webb	(DMO & P)
Mr. H. C. Oatway	D.R.B.
File Copy.	

Notes by 5F  
This was obtained Dec 2, 1968 by 5F at Public  
Archives, Ottawa - part of 246 p. Project  
Second story file. There were other DRB  
meetings with some other names that year.

## DEFENCE RESEARCH BOARD

Minutes of a Meeting to Discuss "Flying  
Saucers" Sighting, 22 April, 1952.

Chairman:

Dr. O.M. Solandt(DRB)

Present:

S/L L.P.S. Bing (JIS)  
F/L V.L. Bradley (DRB)  
Col. G.M. Carrie (DRB)  
G/C D.M. Edwards (DAI)  
Mr. A.J. Langley (DRB)  
Dr. P.M. Millman (Dom. Observ.)  
Cdr. J.C. Pratt (DNI)  
Mr. W.B. Smith (DOT)  
Lt.Col. E.H. Webb (DMO & P)

Secretary:

Mr. H. C. Oatway (DRB)

The Chairman opened the meeting with a brief reference to the more frequent occurrence of "Flying Saucer" sightings. The frequency and persistency of the sightings would tend to discount the theory of 'hallucinations'. This, coupled with an aroused public interest in these sightings, tended to call for a more active stand on the matter. At present the gathering of reports was rather haphazard and the reaction of the Services was passive. It is thought that a more active and intensive effort should be made to obtain these data on an organized basis, and all reports investigated and analysed. The objects of the meeting were then to determine if a more serious effort is justified and, if so, ways and means of implementing an organized effort. Organizations such as the Observer Corps might be enlisted for the job of sighting. If nothing else, this could serve as a useful training for the Corps. An examination of the theories might prove useful in giving a lead to the best locations for sighting. It was fortunate that proponents of the theories of terrestrial and extra-terrestrial origins were in contact with the D.R.B. and their data could be examined first hand.

The Air Force representatives then briefly outlined the work done by the USAF up to a year or so ago. As these efforts consistently resulted in 'nil returns' their project, in so far as the press and public were concerned at least, had been discontinued. Very recently, however, this investigation was re-opened, but is now classified. )

In the discussions which followed, it was pointed out that precise and realistic details were lacking in all known reports. If observers such as the Rangers, watchers on ship board and the Observer Corps, which incidentally is really still in the paper organization stage, are to be enlisted some well planned guidance would be necessary. A small booklet illustrating typical celestial phenomena would result in more intelligent observation and eliminate many erroneous impressions. It was considered desirable to obtain information from U.S. interviews obtained under proper interrogation procedure, but to avoid the U.S. analysis of these

- 2 -

interviews which was often unacceptable to some members of this Committee.

Mr. Smith briefly outlined the extra-terrestrial origin theory. A plot of the frequency and timing of sighting related to the opposition of the planet Mars to the earth was displayed. Sightings occur at approximately six week intervals, but the frequency is much higher during periods when the planets are nearing each other such as in the present month. The more reliable observations place these objects at heights of 100 to 300 miles moving with velocities in the order of 1000 - 2000 mph. Terrestrial bodies making use of airfoils could not operate at these heights. Size and power limitations also negate earthy origins. The brilliance of sighting after sunset could be explained by reflections from the body at these altitudes of the sun's illumination, or in daylight by frictional heating or other magnetic heating effects. Considering the orbital velocities of the earth and Mars (18 and 15 miles per second respectively) and their nearest positions (e.g. 52,000,000 miles on May 8th) with a continuous acceleration of 2 g for 3 or 4 days, these distances could be traversed.

Mr. Langley stated that no electronic reports had been received of flying saucers. It was generally agreed that no electromagnetic radiations had ever been found which could not be traced to terrestrial origin. If electronics are associated with these objects, their frequencies are outside the presently usable ranges. Mr. Smith then elaborated on the work of the ionosphere stations which had been asked to report any unusual findings, but with 'nil returns' to date.

The Chairman outlined in broad terms the theory of terrestrial origin, namely a new type of aircraft (presumably Russian) as expounded by Mr. Frost of the A.V. Roe Company. This theory had some discrepancies, but the aerodynamics were worth following as, even if of extra-terrestrial origin, the bodies would have to follow aerodynamic theory within the earth atmosphere. Also a new high speed aircraft design might be evolved. The theories outlined should give an impetus to the flying saucer investigations.

It was generally agreed that a more active investigation should be undertaken. The Chairman believed that the function of the D.R.B. should be mainly advisory as the collecting of reports could best be done by field organizations. The representatives of the Services agreed and will use their discretion in the choice of their more suitable sections to use for observers.

It was decided that a Committee should be formed to give a lead in this activity and to standardize procedures, etc. Accordingly the following were nominated and agreed to act: Dr. Millman (Chairman) G/C Edwards, Lt. Col. Webb, Cdr Pratt, F/L Bradley, and Mr. Oatway (Secretary) This committee was to prepare a brief of instructions for observers; examine interrogation procedures to get a consolidated and pertinent series of questions;



and to establish a standard method of recording and indexing for subsequent analysis.

Finally G/C Edwards suggested that the RCMP might prove to be a valuable addition as observers. This organization has the added advantage of having trained interrogators.

The Chairman thanked those present for attending and for their willingness to aid in these investigations.

26 April 1952  
O T T A W A .



# DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2

O T T A W A, May 1st, 1952.

PLACE

DATE

23

YOUR FILE	SUBJECT	OUR FILE
<u>CONFIDENTIAL</u>	Unidentified Aerial Objects	22-12-29

Copies sent to ten Agents  
and three Sub-Agents.

*W.E.G.*

CIRCULAR LETTER M.S. 441

A number of recent sightings of unidentified aerial objects have been reported and there is reason to believe that the number of such sightings may increase over the next month or so.

The Defence Research Board has established a committee at Ottawa for the purpose of making a thorough study of all such sightings reported, in an effort to identify these objects, their source and purpose. The Department of Transport is represented on this committee by a member of the Telecommunications Division of the Air Services Branch.

Since the nature of Marine Services' operations in the field necessitates the keeping of careful lookouts at all times by personnel such as lightkeepers, lifesaving crews, and crews of Agency vessels, it is felt that such observers might be in a favourable position to note characteristic data pertaining to any unidentified aerial objects which might come within their view.

Accordingly, it is requested that instructions be issued to all lightkeepers, lifesaving crews and crews of Agency vessels, to note and submit through this office the following information regarding any unidentified aerial object which they may sight:-

- (a) General shape of the object.
- (b) Luminosity or brilliance and colour.
- (c) Maximum dimension as compared with the dimension of some object such as a pencil held at arm's length.
- (d) Approximate bearing, and angle above horizon when first sighted.
- (e) Approximate bearing of path.

.....

- (f) Accompanying or delayed sound if any .
- (g) Approximate time (in seconds) taken to travel through a certain arc (approximate degrees).
- (h) Exact date, time and weather conditions.

All observers should be directed towards making as accurate measurements as possible of any object sighted, so that the exact size, shape and altitude of such objects may be calculated. The Committee is also anxious to know what speeds these objects attain and any characteristics which might indicate their mode of operation.

For security purposes this matter is classified as confidential, and all sighting reports to Marine Agents should be governed accordingly.

*H. V. Anderson*

(H. V. Anderson)  
Director of Marine Services.

~~SECRET~~

IN REPLY PLEASE QUOTE

RM/12/2

SECRET

CANADIAN JOINT STAFF

OFFICE OF DEFENCE RESEARCH MEMBER  
1746 MASSACHUSETTS AVE., N.W.  
WASHINGTON, D.C.

28 October 1952

Chairman,  
Defence Research Board,  
Ottawa, Canada.

Attn: Aero Section

Unidentified Flying Objects  
Project Grudge

1. A USAF analysis of the first 244 reported incidents is summarized below.

2. Since 5 December 1948 a series of recurring phenomena described as "green fireballs" have been reported in the general vicinity of Albuquerque, New Mexico. Dr. Lincoln La Paz, noted meteoritic expert has been directly, though unofficially, associated with the investigation of these sightings and has himself observed the phenomena. Dr. La Paz states he is convinced the green fireballs are not ordinary meteors. This group of incidents has little or nothing in common with other incidents on file with Project Grudge, therefore, these incidents are not considered in the analysis. The Scientific Advisory Committee was asked to investigate the matter and had advised that an independent investigation be conducted in the field of atmospheric research.

3. Upon eliminating several additional incidents due to vagueness and duplication, there remain 228 incidents. Thirty of these could not be explained because there was found to be insufficient evidence on which to base a conclusion.

4. Consulting agencies provided plausible solutions for 164 incidents with the following comments and findings:

(a) Rand Corp. - (172 incidents considered). "We have found nothing which would seriously controvert simple rational explanations of the various phenomena in terms of balloons, optical illusions, conventional aircraft, planets, meteors, bits of paper, practical jokers, psychopathological reporters, and the like."

(b) Ohio State University (Dr. Hynck - 244 incidents considered). Assuming evidences of observers and investigators to be correct, Dr. Hynck concluded that 32% could be explained astronomically, 35% could be attributed to balloons, aircraft, rockets, birds, etc., and 33% either lacked necessary evidence or a suitable explanation was not apparent. When due allowance was made for inaccuracies in observing and reporting, 53% might be explained astronomically.

Classification cancelled / Changed to

By authority of

Date

Signature

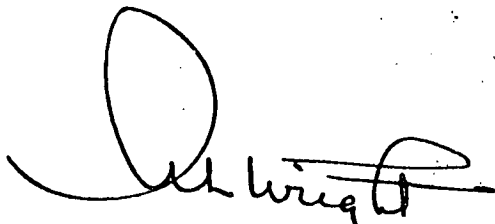
Unit / Department

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-2-

- (c) Air Weather Service - (233 incidents considered).  
12% apparently were weather balloons.
- (d) Air Materiel Command Aeromedical Laboratory (Dr. Paul M. Fiits - 212 incidents considered. There are sufficient psychological explanations for the reports of unidentified flying objects to provide plausible explanations for reports not otherwise explainable. These errors in identifying real stimuli result chiefly from inability to estimate speed, distance and size.

5. Of the remaining 34 incidents, investigation shows that they form no pattern in regard to area of sighting, type of object, or manner of performance. There are indications, however, that some sightings were influenced by earlier reports, and probably would not have been considered unusual or reported had there been no publicity.

  
(A.L. Wright)  
Defence Research Member

cc: Chairman, CJS  
Air Member, CJS

Classification cancelled / Changed to Unclass  
By authority of DSIS  
Date 25 May 84  
Signature R. M. [illegible]  
Unit / Rank / Appointment A/DSIS

~~SECRET~~

LRBC 3800-16-1

# M E M O R A N D U M

'8 October, 1958

Classification cancelled / Changed to DSLS

By authority of

Date \_\_\_\_\_

**Signature**

Unit / Rank / Appointment

Winnard:

## Sections of Unidentified Flying Objects

Reference your minute re letter from the National Investigations Committee on Aerial Phenomena dated 14 August, 1958. I have drawn up a draft letter which PRO might forward to NICAP. It should be noted that Mr. Smith is a member of this organization and surely the Director of NICAP must be aware of this. It was also thought that the procedure for investigations of UFO reports should be reviewed to establish what was now being done by Canadian agencies in this regard.

2. Past History:

U.S. "Project Saucer" was completed about 1950 and it was found desirable to solicit Canadian reports. At the 220th meeting of the JIC on the 12, Apr. 1950, UFO's were discussed and the following decisions were reached:

- (a) DSI and DAI were to collaborate in preparing a questionnaire to be distributed to field intelligence officers of the three services and the RCMP.
- (b) DAI is to co-ordinate the investigation arrangements in the field.
- (c) All field reports were to be passed to DSI for official examination on behalf of DND.

In late 1950 a questionnaire or sighting report form was drawn up and approved; copies and instructions were passed to field units. (Ref: letter 321-1-9 (DAI) 19 October, 1950 to TCRQ)

3. In 1952 the "Project Second Story" Committee was formed and the sighting report form was revised. The Committee met about six times, the most recent meeting apparently being 25 Feb. 54. The Committee concluded its activities which were summarized in a memo by Dr. Millman, Chairman. It was concluded that the sightings did not lend themselves to a scientific method of investigation. In 1954 the Secretary of the Committee informed DAI of Dr. Millman's summary and stated that reports were still being collected, but that no analysis was being carried out.

1. Action by DRB/DSI

A tabular record of reports of sightings dating back to 1954 was initiated by F/L Birch of DSI. This is kept in this office and is classified SECRET. The last entry is a sighting of 8th June 1956. A file is also kept here which contains a multitude of press articles, sightings, etc. DRB file 3800-10-1-1 (3 vols.) contains a large number of sighting reports dating back to 1947.

### 5. Recent Action by DAI

This morning I examined a number of files held in DAI and talked to S/L Lovelace. In January, 1957 DAI initiated liaison duties with Mr. W. Smith of the Department of Transport. A sighting report form was devised which proved to be identical to that devised by Project Second Story Committee. A copy of this form is attached.

c. In December, 1957 a letter was prepared by DAI in reply to a request from a magazine regarding Canadian policy in investigating UFO's. An extract is as follows: "The DND makes no provision for the investigation into these phenomena. However, it has come to our attention that Mr. E.B."

[illegible]

Also in December, 1957 a letter was written to ACAS by DAI: OCAF has no official policy concerning the subject. There is no within IHDHQ commissioned to deal with the reports of these phenomena, though DAI seems to be a gathering place for them. There has been a instance of October, 1950 where A/C Briens, then AFAP, ordered reports would be filed, but that investigations would be played down. has never been an investigation of any report on file at AFHQ". OLO-105 (DAI) 10th December, 1957)

8. At present, S/L Lovelace in DAI deals with the matter of flying saucers and is maintaining liaison with Mr. Smith. If a report is received the observer is asked by DAI to complete a sighting report form which is then forwarded to Mr. Smith. The last report in the DAI files was dated July, 1958. DAI did not appear to be aware of earlier policy as explained in paragraphs 2 and 3 above.

2. It would appear that OSI is not now involved to any large extent in the investigation of UFO reports. However the decision mentioned in paragraph 2(c) above may still be valid. Possibly the matter should be considered further.

(E.A. Bernard) S/L

Classification cancelled / Changed to Unclass  
By authority of DSIS  
Date 25/6/84  
Signature [Signature]  
Unit / Rank / Appointment NRCS

Navy	<input checked="" type="checkbox"/>	NSRB					DISTRIBUTION			
AIR	<input checked="" type="checkbox"/>	FBI								

## CHAPTER VIII

*Kenner  
P/S from Ouker Spear  
1953*

### The Canadian Project

**A**BOUT twice a year since the fall of 1950, Smith had flown to Washington on official business. Each time, before he left, we had discussed the saucers and exchanged sighting reports. In the hope that he might be planning another visit, I wrote him at Ottawa. Then, while waiting for his answer, I went over the information I had on the Canadian investigation.

Two years before this, when I first learned of the Canadian interest in saucers, most Dominion officials and scientists had been openly skeptical. But early in '52, after a series of unusual sightings, their attitude had changed. Though most of these recent sightings had been classified, a few were released to the public. Two of the published reports came from veteran airmen of the Royal Canadian Air Force.

On the night of January 1, 1952, an orange-red disc appeared over North Bay, where the RCAF has a new jet base. For eight minutes, flying at a high altitude, the machine circled, dived, and zigzagged over the field. From its estimated height in the stratosphere, the saucer was one of the largest ever sighted. Its maneuvers were made at supersonic speeds.

When the report was published, RCAF Intelligence

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## THE CANADIAN PROJECT • 129

refused to comment. Then a second saucer was reported, again over North Bay. Approaching from the southwest, it stopped directly above the base. After hovering for a moment, it swiftly reversed direction. Climbing at an angle of 30 degrees, it disappeared at tremendous speed.

Meantime, other disturbing reports had reached the RCAF. Until then, many top officers, taking their cue from the Pentagon debunking, had laughed off the sightings. But after the second North Bay case, a high-level conference was held at Ottawa.

Four days later RCAF Intelligence publicly admitted it was starting a serious investigation. At the same time the Defense Research Board announced a new project, now secret.

"We are carefully studying the information," said Dr. O. M. Solandt, chairman of the Board. "At the moment we are as mystified as anyone else."

Another official statement was given out by Dr. J. C. Mackenzie, chairman of the Atomic Energy Control Board and formerly president of the National Research Council.

"It seemed fantastic that there could be any such thing," said Dr. Mackenzie. "At first the temptation was to say it was all nonsense, a series of optical illusions. But there have been so many reports from responsible observers that they cannot be ignored. It seems hardly possible that all these reports could be due to optical illusions."

Dr. Peter Millman, a famous Dominion astrophysicist, also admitted he was baffled after studying the sighting reports.

"It is no good just laughing at these reports. We can't discover any conventional explanation which would cover the reported maneuvers of these objects."

Just four days after the new project was begun, a formation of orange-red discs was sighted over Toronto, flying high above the city. Then on May 1 a lone saucer, moving at terrific speed, flashed over the Canadian capital. In this sighting at Ottawa, the disc's speed was calculated



as 3,600 m.p.h. by government investigators from "Project Magnet."

Unknown to most of the public, this special project had been started three years before, by geomagnetic engineers and scientists in the Telecommunications Division, Department of Transport. Its originator, the engineer in charge, was Wilbur B. Smith.

Probably no one in Ottawa was better equipped for a saucer investigation than Wilbur Smith. As the official in charge of broadcast monitoring, he could direct his men to listen for any strange messages; as a geomagnetic engineer, with a government laboratory at his disposal, he could carry out research on certain propulsion theories; through the official ionosphere observatories he could keep a radar check on saucers flying at extremely high altitudes.

In addition to this, Smith was an electronics expert, with several inventions to his credit. One was a high-speed radio direction finder used in World War II. Another was a new type of voltmeter, and a third was a regenerative noise filter. He was also an expert on electronic analysis of graphic charts.

When I met Smith, in 1950, he was in Washington to represent Canada at an international conference on wavelength allocation. For two weeks, between his committee meetings and at nights, we covered every angle of the saucer problem. A tall, quiet-voiced man with close-cropped black hair, Smith had the cool detachment of a typical scientist. In our first talk he told me of the analyses he and his men had made. Then he gave me his opinion.

"I'm convinced they're real—that they're machines of some kind. We've weighed three possibilities. One, they're interplanetary. Second, they're a United States secret device. Third, they're Russian. The last two don't stand up. From the weight of evidence I believe the saucers come from outer space. And I think their appearance is what suddenly increased your government's interest in space travel and an artificial satellite. Judging from our

own operations, I'm sure your government also is vitally concerned with learning the secret of propulsion."

"What do you think it is?" I asked him.

Smith laid a pad on the table—we were lunching at a downtown hotel. Then he sketched a rocket-shaped craft.

"First, let's consider the parent ship. From the high altitude sightings, I think it must be a type like this. For power it could use nuclear fission, mass conversion of energy, or some other revolutionary source, such as cosmic rays. But our experiments indicate that the true discs, which are probably launched from large parent ships, utilize magnetic fields of force. And it's possible that the parent ships also use this same source of power."

It wasn't the first time the electromagnetic field theory had been suggested. Before Scully used the idea, in his story of the little men, I'd checked it with two or three engineers. But when several well-known scientists ridiculed the theory, I'd lost interest in it.

The first hint of electromagnetic propulsion had come in '47, on the day of Ken Arnold's now famous sighting. About that same hour, an Oregon prospector later reported, several discs appeared over the Cascade Mountains. As they circled overhead, his compass needle went wild.

His claim drew a tart comment from Project Sign analysts.

"It is difficult to take this seriously. It would imply fantastically large magnetic fields."

There had been other hints of discs rotating to utilize magnetic fields. One report came from the Reverend Ross Vermilion, a former B-29 pilot. The minister and other witnesses had described a rotating saucer which hovered a few hundred feet over a Kansas highway. Also, I had found some scientific support in the experiments of Dr. Fernand Roussel, a Canadian physicist now living at Lasqueti Isle, British Columbia. In a privately published treatise called "The Unifying Principle of Physical Phe-

nomena," Dr. Roussel explained his theory of universal electromagnetic fields, which he believed space ships could tap in traveling between planets. (This treatise, which is now out of print, has several points in common with Einstein's unified field theory.)

Quoting Doctor Roussel, I mentioned this propulsion theory in my 1950 book on the saucers. But after the storm raised by Scully's electromagnetic explanation, I'd stopped giving it serious thought.

Since then, several scientists have backed the theory. One who publicly advanced the idea was Dr. Franz Zwicky of the California Institute of Technology. In 1951, writing in the *Journal of the American Rocket Society*, Dr. Zwicky said that it may be possible to use the electricity of the ionosphere. In this upper atmosphere ions are stripped of some outer electrons by the ultraviolet rays of the sun. This ionization frees molecules which carry large electric charges.

"If we can tap this electric force," said Dr. Zwicky, "it may prove better than atomic energy for propulsion."

Recently the Carnegie Institute of Terrestrial Magnetism admitted new discoveries about the ionosphere. Until two years ago this layer, which begins about 50 miles up, was believed to be utterly still. Now, radio-echo (radar) tracking shows there are high-speed "waves" which reach speeds up to 540 miles an hour. Unsuspected downward velocities, as high as 275 m.p.h., also have been discovered. Future ionosphere research may give us the key to tremendously powerful magnetic forces now unknown.

Other reputable groups, including scientists of the British Interplanetary Society, have suggested space-ship propulsion by means of external fields of force. It is only the beginning, but it shows the changing attitude toward this once-derided theory which a more advanced race may long ago have put to practical use.

In 1950, however, Wilbur B. Smith and his little group

were the only government scientists I knew who took the idea seriously.

"Certainly the theory's been ridiculed," Smith said when I mentioned some scientists' reaction. "So were plans for the aeroplane, the helicopter, jets, the A bomb—practically all our modern developments. I'd have doubted it myself before our experiments."

At the start the Canadian project was unofficial, though the research was done in a government laboratory with official approval.

"If you publish any of this," said Smith, "I want you to make that clear. We're government engineers and scientists, but we are working on our own time. We've gone back to the fundamentals of electromagnetism and examined all the old laws. We know now it is possible to create current by a collapse of the earth's magnetic field. Eventually, I think, we can achieve enough current to power a flying disc. And we plan to build such a disc."

"How much of this can I use?" I said.

Smith hesitated. "I'll give you the information, but it will have to be cleared with my government."

After his return to Ottawa, Smith rewrote my original draft and sent it to the Canadian Embassy in Washington. The revised report was cleared for me by Mr. Arnold Wright, Defense Research member of the Canadian Joint Staff, after a check at the Pentagon. The following is a verbatim copy of the most important statements.

"A group of Canadian scientists has been working for some time on certain problems connected with the earth's magnetic field. These investigations appear to point the way to a new technology in magnetics, and if the initial conclusions are correct they offer a ready-made explanation for many of the striking features which have been reported in connection with the sightings of flying saucers.

"The basic premise is that it is possible to produce a magnetic 'sink' [the name arbitrarily chosen by Smith and his engineers] within the earth's field; that is, a region into



DEPARTMENT OF TRANSPORT  
INTRA-DEPARTMENTAL CORRESPONDENCE

22-12-33<sub>2</sub>  
4-52

OTTAWA, Ontario, August 10, 1953.

PLACE

DATE

YOUR FILE

SUBJECT

Project Magnet Report

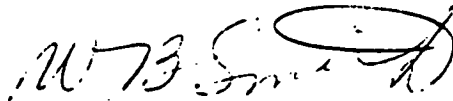
OUR FILE

22-12-29 (R.B.M.)

MEMORANDUM TO THE CONTROLLER OF TELECOMMUNICATIONS:

1. Attached is a report on the activities and conclusions of the Project Magnet group in the analysis of the sightings of unidentified flying objects. We believe that our work has been much more thorough than any done elsewhere, certainly more so than the United States' effort which has been confined essentially to the cataloguing of everything as it is reported. While we have not had the large number of sightings with which to work that have been available in the United States, we feel that all which we have included as proper sightings are significant. The Canadian sightings appear to be consistent with other sightings elsewhere in the world and we have therefore assumed that they represented a fair cross section and have dealt with them accordingly.
2. As you will note from the report, we have concluded that a significant number of the sightings are PROBABLY due to some kind of vehicles and we can get a glimpse of the technology which makes them possible. We do not claim that the case for alien vehicles is proven by any means, but we do believe that there is sufficient evidence to warrant a scientific investigation on a reasonable scale to find out what these objects are and how they operate.
3. The Project Second Storey Committee is quite inadequate for this job because of its membership structure and terms of reference. Aside from Dr. Millman and the undersigned there is no one on the committee who has a scientific interest in the Saucer phenomenon. Furthermore, since the committee is dominated by military intelligence officers whose establishments are already overburdened with other work, there is a definite tendency to follow the United States pattern of merely cataloguing and filing the sighting data. Efforts of the undersigned to guide the committee into a more active study of this subject have been quite unsuccessful since few of the members are willing to spend the necessary time studying the available data to form any opinion whatsoever.

4. Therefore, it is recommended that the existing Project Magnet group be expanded into a scientific committee to deal with the saucer sightings in whatever manner may appear to be appropriate to their solution. The committee should be made up of scientific people who are able and willing to put some effort into the work and if the committee is established on a formal basis the members would feel free to do this. It is suggested that the N.R.C. and D.R.B. could provide suitable people from their ranks if they were officially invited to do so.

A handwritten signature in dark ink, appearing to read 'W.B. Smith', with a large, stylized flourish at the end.

(W.B. Smith)  
Senior Radio Engineer



DEPARTMENT OF TRANSPORT  
INTRA-DEPARTMENTAL CORRESPONDENCE

2  
8.52

OTTAWA, Ontario, November 12, 1953.

PLACE

DATE

YOUR FILE

SUBJECT

Flying Saucer Publicity

OUR FILE

(R.B.M.)

MEMORANDUM TO THE CONTROLLER OF TELECOMMUNICATIONS:

1. The attached file 22-12-33 gives the history of our Project Magnet. This project was authorized by Commander J.P. Edwards then Deputy Minister of Transport for Air Services in December 1950.
2. At the time Project Magnet was initiated we felt that there was a substantial linkage between some experimental work which we were doing and the modus operandi of flying saucers and we merely wished to bring this work to the attention of the proper authorities and to request permission to carry on with it. Our initial experiment turned out to be due to a phenomenon of gyro-magnetic interaction which has since been the subject of several scientific articles in current literature. It did not, however, invalidate our original thinking as to the possibilities of a fruitful exploration of magnetic phenomena generally. This file contains several documents which indicates the progressive thinking of the Project Magnet group.
3. On April 22, 1952 Doctor Solandt called together a group of people who organized as Project Second Storey Committee. The terms of reference to this Committee were rather indefinite except that they were to look into the matter of flying saucers generally. The committee met periodically and eventually evolved a sighting report questionnaire form and a guide for interrogators. This was considered to be a necessary first step in the study of unidentified flying objects.
4. The Project Second Storey sighting report forms were used by this Department in following up reports of unidentified flying objects which were sent in from time to time by our various field offices. These reports have been carefully analysed and copies of them referred to Project Second Storey Committee.
5. At an early meeting of Project Second Storey the undersigned brought to the attention of the Committee the nature of the work being done by the Project Magnet group. The Committee, however, felt that investigation of this type was outside their terms of reference and preferred to confine their activities entirely to receiving and cataloguing sighting reports. From time to time the undersigned suggested at Committee

WZM

meetings various definitive actions which could be taken in an effort to get closer to the answers to the flying saucer riddle, but in each case the Committee felt that they should not undertake work of this nature.

6. The Project Second Storey Committee is composed largely of intelligence officers whose current establishments are already overloaded with other work and it is understandable that they would be reluctant to undertake a new program which was likely to increase their work with small assurance that answers would be obtained at an early date. Aside from Doctor Millman and the undersigned there was no one on the Committee who had a scientific interest in saucers.

7. In view of the attitude taken by the Project Second Storey Committee and the work which had already been done by the Project Magnet Group it was decided that Project Magnet should carry on their own work quite independently. Unfortunately, two resignations in the Broadcast and Measurements Section severely curtailed the theoretical and laboratory work. Therefore, the only productive work which the group felt they could carry on with was a detailed study of the sightings themselves.

8. On August 10, 1953 a report was prepared covering the sightings which had been reported to and analysed by the Project Magnet group during 1952. This report indicated that there was a real probability for the saucers being alien vehicles and recommending strongly that definite action be taken towards the uncovering of the technology which made them possible.

9. From a statistical analysis of the frequency and geographic distribution of saucer sightings generally it was concluded that a good probability existed for a visitation in any one area within a period of four months to one year. On this basis it was decided to establish some type of observation station so that electrical, radiation, gravitational or other effects might be observed on instruments should a saucer pass in the immediate vicinity. Equipment was available from the broadcast skywave recording program which had been discontinued the previous year and together with a number of instruments which were made up in our laboratory or borrowed from the University of Toronto the observation station was set up. It is now practically in operation.

10. Over a period of years it has become increasingly apparent that the United States Government have not been able to obtain answers to the flying saucers readily and consequently have relegated the matter very much to the background. The security classifications which existed

initially have been lifted one by one until at the present time only a few highly significant sightings appear to remain classified.

11. So far as Project Magnet activities are concerned it has been noticed that current scientific periodicals frequently carry technical articles which are almost exact duplicates of the work which we have been carrying on. Consequently, it does not appear that there is any need to keep the subject of magnetics in any kind of a classification. During the past year at least the matter of our theoretical and observational work has been freely discussed in scientific circles from which a great deal of useful assistance and suggestion has been obtained. While at all times the Project Second Storey security classifications have been respected we have considered that our own work had definitely outgrown any need for classification until such time as it could be shown that it was of significance to national security.

12. Major Donald Keyhoe recently published a book entitled "Flying Saucers from Outer Space". In this book reference is made to the activities of our Project Magnet group. Most of the information which Major Keyhoe possesses came through a document which was a re-draft of an article prepared by Major Keyhoe before Project Magnet was even started. This draft was rewritten by the undersigned to bring it more in line with what we believed to be facts and a reasonable line of speculation. This document was delivered through Doctor Solandt and Mr. Arnold-Wright, Defence Research Liaison Officer, Canadian Embassy, Washington. Major Keyhoe is a personal friend of the undersigned and I have discussed with him on several occasions my own personal opinions regarding the flying saucers and Major Keyhoe has included some of this information in his book.

13. On Saturday November 7 the Toronto Star reviewed Major Keyhoe's book and published a large display which featured prominently the Canadian activities. As a consequence of this publicity the undersigned was flooded with telephone calls from various reporters seeking verification of the information contained in the Toronto Star article. They were informed that the Canadian project still existed and was substantially as published by the Star. Apparently some reporters had obtained a clue as to the existence of our Shirley Bay saucer recording activities and asked for confirmation on this point. It is unfortunate that the Press attached the significance which they did to this matter as it is in fact a very small effort and is on a par with many such activities carried on by this Section from time to time to obtain data which we need in connection with various studies which we are making.

14. With particular comment to the Journal article on November 11 the reporter asked how the project was financed and was informed that it consisted entirely of re-claimed equipment and was being carried on within the Broadcast and Measurements establishment. The activities have represented a very small and quite insignificant outlay of funds.

15. It is admitted that the undersigned may have been in error in talking to the reporters and not referring them to our Public Relation officer but it was felt that it would be better to give the reporters the facts than to have them write the usual story based largely on supposition and which experience has shown can be particularly wild. The manner in which the publicity arose is certainly open to criticism but it is the firm opinion of the undersigned that the public generally are aware of the fact that flying saucers have a high degree of probability of being alien vehicles and that there is no reason why the fact that a Government agency is doing something about it may be concealed particularly in view of the statements which Doctor Solandt and Doctor Mackenzie made approximately a year ago just prior to the organization of Project Second Storey Committee.

16. It is strongly recommended that a much greater effort be made by the Government, particularly in the field of theoretical physics towards a solution of the saucer technology. It is apparent that as long as there is any probability at all that the saucers are real alien vehicles they certainly represent a technology which would be extremely valuable to us and it is the sincere hope of the undersigned that something can be done to acquire at least a portion of this technology.



(W.B. Smith)  
Senior Radio Engineer





D. M. 13 55

RP-8

DEPUTY MINISTER OF TRANSPORT  
OTTAWA, CANADA

FILE:

November 17th, 1953.

MEMORANDUM TO THE MINISTER -

In December 1950, Lt. Comm. C.P. Edwards gave approval to a proposal advanced by Mr. W.B. Smith, Senior Radio Engineer, in charge of the Department's Broadcast and Measurements section, that a small group of technicians in our Telecommunications Division carry out, on a part time basis, a small programme of investigations related to their work in geo-magnetics, which Mr. Smith believed might lead to further information on flying saucers.

In April 1952, a committee known as Project Second Storey, was formed under the chairmanship of Dr. Solandt, Chairman of the Defence Research Board, for the purpose of looking into the matter of flying saucers generally. This Committee met on four or five occasions, and their meetings led to the preparation of a Sighting Report which, it was felt, would serve to standardize sighting procedures. The Department of Transport was represented by Mr. Smith on this Committee because of the very large number of field establishments in Transport. Subsequently copies of the Sighting Report have been distributed to our field officers and these Reports are completed and forwarded to headquarters with information regarding unidentified aerial objects seen.

Inasmuch as the Project Second Storey work was restricted in scope, the Project Magnet group continued their studies. To enable the carrying out of their investigations, used equipment already in the Department, together with a number of instruments made up in our labs or borrowed from the University of Toronto, were utilized.

Apparently the recent publicity arose as a result of a review made on November 7th by the Toronto "Star", of the book published by a Major Donald Keyhoe, who was acquainted with the exploratory work being carried out by Project Magnet. His book contained mention of Mr. Smith's

.....

WLM

ame and this led to the latter receiving numerous calls from the Press regarding the operations at Shirley Bay. Mr. Smith informed the Press that the equipment used was entirely of the reclaimed type and that the activities of Project Magnet represent a very small outlay of funds.

J-C. Lessard.

# Ottawa Engineer Thinks Canadian Descendants Were Men From Space

By ANGELA BURKE  
Star Staff Correspondent  
Ottawa, Nov. 26 — Wilbur

Smith, 47-year-old electrical engineer who for one year operated a flying saucer observation centre for the department of transport near here, believes Canadians could be descendants of men and women from outer space. Smith thinks it is probable that spacemen have colonized every available planet in the universe.

"I'm inclined to believe that earthlings are descendants of these people," he says. Smith is chief radio regulations engineer—and an M.A. to boot—with the transport service. Since termination of the flying saucer observation centre, he has been privately carrying on a one-man vigil on objects from outer space. "I have interviewed people who witnessed landings of spacemen. I've checked on their credibility." Questioned about their manner of dress, Smith answered:

"They're like us to the extent they wear clothes. They don't wear shells like crustaceans."

## Not Little Green Men

He denied that space travelers resembled "little green men."

Smith asserts that no basically sound religion should be upset about the possibility of life on other planets. "I can't find anything in the Christian religion that says flying saucers shouldn't exist, or that there shouldn't be people elsewhere in the universe."

Smith is not a member of any church although he attends Anglican services periodically. "I believe that earthly existence is only a small part of our total existence," he says.

"When we die we merely go into another phase. We progress, we come back to live again and learn all that we didn't learn in our previous life. There must be levels of intelligence higher than our own. Maybe men from outer

space have reached higher intellectual plateaus."

Mr. Smith doesn't pretend to have the answers to the questions of the universe. He is careful to state his opinions are purely personal ones; that philosophers with far greater knowledge than his have been plagued with these same problems for centuries and still haven't come up with the answers.

## Sighted Long Ago

To the suggestion that flying saucers might be Russian spacecrafts, Smith replied

that sightings have been made long before the USSR was established. "In 1947 a new flurry of sightings was reported and at that time neither the Soviet nor the U.S. had anything that went faster than sound. "Since the launchings of the Sputniks", he continued,

"it's not considered bad form to see flying objects in the sky. As a matter of fact, it's stylish."

Mr. Smith who is a member of the co-ordinating committee of the international geophysical year, believes spacemen do not live under dictatorships. In his opinion

He is W. B. Smith, a Canadian government engineer contends this may well be the origin of life on earth.

A Canadian government engineer contends this may well be the origin of life on earth.

OTTAWA, Nov. 18. — "Many agree with this idea—both scientists and laymen," he added.

It would be "supreme egotism," to assume earth people are the only race, he said. "I feel that intelligent races throughout the universe probably were responsible for stocking this planet soon after it first became habitable."

He admitted that no doubt many evolutionary mutations had occurred in the descendants of the original stock placed here. But he argued that the colonization theory is "closer to the Biblical story of flying saucers. Re-

## STOCKED FROM OUTER SPACE?

# Contentends Earth's a Colony

Monday, November 18, 1957—THE DETROIT NEWS

TORONTO DAILY STAR  
Tues., Nov. 26, 1957 5

it's impossible that a civilized race advanced so far technologically would tolerate a totalitarian government. "The two things are contradictory," says Smith.

The following letter is a copy of an original sent to CUFORN recently. Unfortunately, due to a dire need to reorganize our files, we cannot find out who sent us the letter. All that we can recall is that the person who sent it was very interested in exchanging information on Wilbert Smith, one of the pioneers in UFO research in Canada. Smith was an engineer with the Canadian Government's Department of Transport. He ended his career as the Superintendent of Radio Regulations Engineering for the Department. He died in 1962 after contracting cancer. We do not know who Mr. Caswell was.

February 23, 1959

Dear Mr. Caswell,

I appreciate your efforts in trying to bring to the public attention the facts concerning flying saucers, but I must advise you that many sequences are yet to be fulfilled before the public generally will be able to accept the reality of the people from elsewhere.

I have no objection ~~XXX~~ to your efforts to have my articles published by your local paper but I would request that ALL biographical material concerning myself be omitted. I feel that the articles themselves should stand on their own two feet. I have no objection to having my name appended or a reference to my HOME address.

For your information EVERY nation on this planet has been officially informed of the existance of the space craft and their occupants from elsewhere, and as nations they must accept responsibility for any lack of action or for any official position which they may take. There is nothing more to be done ~~XXXXX~~ along these lines, and effort in this direction is effort wasted.

Since you are not too far from North Bay I would suggest that you might find Mr. Richard H. Frampton 32 Gertrude St. West, worth getting in touch with. He and two friends visited me last fall and I found them most interesting.

Yours sincerely

W.B. Smith

W. B. Smith

OTTAWA ENGINEER EXPLAINS SAUCERS

Men From Mars Among Us—He's Talked To Them!

By Philip Cooper  
Column Staff Writer

A question which has fascinated science fiction writers for a century or more has been answered for at least one Ottawa man who firmly believes in flying saucers.

Yes, he assures us, there is life on other planets.

"They tell us they live on Venus and Mars," said Wilbert Smith, a quiet, unassuming engineer who claims he has been in contact with the operators of these mysterious craft from outer space.

In fact, if these "extraterrestrial intelligences" can be so called, they are everywhere and throughout the universe. Mr. Smith is an independent contractor, and he looks like us, what's more, they look like us.

Mr. Smith is an independent contractor, and he looks like us, what's more, they look like us.

Mr. Smith is an independent contractor, and he looks like us, what's more, they look like us.

He doesn't surprise or worry him that most scientists refuse to take their research seriously, with their "orthodox" training, he thinks. It is hard to shed traditional misconceptions.

But he has seen and heard enough to persuade him that these space folk do exist, and that they have something to teach us.

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THE OTTAWA CITIZEN

OTTAWA, CANADA, TUESDAY, APRIL 14, 1936. Page 21, 10, 14



KEY TO A RIDDLE?

Engineer Wilbert Smith believes this "binding force" may solve the mystery of many unexplained air disasters. He says the invention was inspired by messages from "the flying saucer folk."

~~CONFIDENTIAL~~

(1) RECORDS  
(2) FILE

YOUR FILE No.  
Votre dossier

OUR FILE No. 22-12-33 (TRD)  
Notre dossier 22-12-39

DATE September 15, 1969

FROM THE

SUBJECT PROJECT 'MAGNET'

Dr. P. M. Millman, National Research Council, has advised me that the documents reporting the results of the Second Story studies in project 'Magnet' be declassified. Those reading this file will see that project 'Magnet' is a part of this file.

DRB  
Agreed  
to this  
WFO

2. Since the question of flying saucers is still attracting public attention and since this file covers documents relating to the studies behind project 'Magnet' and, indeed, records much of the discussion in the Department of Transport surrounding project 'Magnet' which is confidential in nature, it is recommended that this file be down classified at least to the confidential level. At no time should it be made available to the public.

3. Those wishing to obtain a copy of project 'Magnet' can do so provided they represent an organization, describe the purposes of the organization and set forth the basis of their need for a copy to Dr. Millman of National Research Council. They may see the project 'Magnet' report upon making an appointment at the Meteor Centre, phone 3-9318.

4. A copy of the project 'Magnet' report on this file is the original and should not be destroyed until such time as this subject has "cooled off".

BTR  
a copy of this  
memo has been attached  
to the cover of the report.  
also a copy made for  
22-12-29 (Project Second Story)  
C. J. Wilson  
6/10/69

*[Signature]*  
H. J. Wilson

DEPARTMENT OF NATIONAL DEFENCE  
INFORMATION SERVICES



MINISTÈRE DE LA DÉFENSE NATIONALE  
SERVICES D'INFORMATION

D1350-500/A (DIS)

Ottawa, Ontario  
K1A 0K2

Ottawa 4, Ontario

October 24, 1972

Mr. Ronald W. J. Anstee  
6566 - 24 Avenue  
Rosemount  
Montréal 409, P.Q.

HIT-3116

Dear Mr. Anstee:

Thank you for your letter concerning your request for information regarding UFOs.

We are sending you the information we have on Unidentified Flying Objects. Prior to 1968, all sightings of UFOs reported to Canadian Forces Headquarters were investigated by the Director of Operations. It has not been the practice to allow the general public to study these files.

Since the beginning of 1968, UFO reports received by the Canadian Forces are passed to the National Research Council. The branch examines reports for scientific reasons warranting further investigation. The department of National Defence and other Federal Government agencies may be called upon to carry out these investigations for NRC.

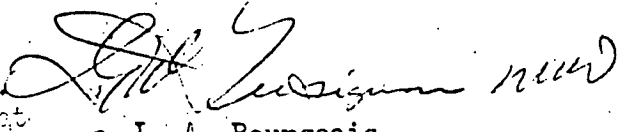
Canadian Forces Headquarters has never made a public statement concerning UFOs, however, we endeavour to carry out our investigations with an open mind. We neither agree with nor deny the existence of UFOs. Investigations to date indicate that there is no evidence to suggest that UFOs present a threat to the world, however, certain reports suggest that they exhibit a unique scientific or advance technology that could possibly contribute to scientific or technical research.

It is hoped that the information is of interest to you. May we suggest that further enquiries be sent to the National Research Council, Montreal Road, Ottawa 7, Ontario.

Yours sincerely,

Note: We regret our departmental library has no knowledge of the publication in question. However, it is suggested that you write to:

Commandant  
USAF Academy  
Colorado Springs, Colorado  
U.S.A. 80012

  
L. A. Bourgeois  
Brigadier General  
Director General Information

ARTHUR BRAY  
1187 AGINCOURT ROAD  
OTTAWA, ONT. K2C 2H8  
CANADA  
(613) 225-2099

November 21, 1982.

Mr. Stanton T. Friedman,  
110 Kings College Road,  
Fredericton, New Brunswick,  
E3B 2E7.

Dear Stan:

In reply to your letter of October 31st, you misunderstand my attitude towards science and scientists. My negative attitude is not directed at all scientists or science per se, but that segment of the community which refuses to examine the evidence for UFOs and other "unscientific" subjects. To ignore evidence and make pronouncements of its "unworthiness" is hardly scientific.

If you had read my writings carefully you would have noted that I speak frequently of the "scientific establishment", "orthodox science", "the majority of scientists" etc. I am clearly not against science or scientists, just those that ignore evidence and ridicule those who do examine it. I have had precious little complaint about those who are open-minded enough to study the evidence objectively and thoroughly before opening their mouths.

In fact, I give great credit to those who have explored "unorthodox" subjects and admire them for their courage. I gave credit to many of them in The UFO Connection, not only in chapters 9 and 10 in particular but also in the last paragraph of my Preface.

Further, a good deal of my paper Scientists in Support of UFOs (a copy of which I sent to you last spring) was based on the work of scientists, and I quoted them (including yourself) and gave full credit to all. If that paper wasn't a positive approach to a great many scientists, I don't know what is. It has since been published in the APRO Bulletin, No's 8 & 9 this year.

In view of the above, I fail to see why you are "dismayed" at my attitude. I think you may be overly sensitive because you are a scientist yourself. You are not among the group I do criticize.



Regarding your fourth paragraph, I do not understand your suggestion that my statement may have been "intentionally in error". I made no "intentional errors", and if there are accidental ones, I will be pleased to hear about them. I have attached a copy of Smith's notes on this interview. My info on Sarbacher's background came from American Men of Science 11th edition, plus another paper from Smith's files (undated). Copy also enclosed. You can take it from there. I assume "Georgia University" means "University of Georgia" but I may be wrong. I would think that Sarbacher is dead by now and National Science Labs Inc. probably no longer exists. Thirty years is a long time.

As for my self-publishing, I am not convinced that the imprint of Jupiter Publishing makes it obvious to a prospective buyer that Jupiter is me. Without claiming my book is any good, you may not be aware of the fact that some of the world's great literature was initially self-published and was only picked up by a professional publisher after its worth was recognized. I state this only to show that there is nothing wrong with self-publishing.

Anyway, my experiences with Canadian publishers and my reasons for self-publishing are no one's concern. Likewise, the number of copies I have sold is no one's business but mine.

Finally, my concern with Stork was that it was referred to in a Canadian government report (with no mention of BMI) and as I was unable to locate any other mention of Stork, it seemed that it could very well be a significant study unknown to most of us. Finally, when I acquired a copy of Bruce Moccabee's paper Historical Introduction to Project Blue Book Special Report #14, the pieces fell together. He identifies it as "White Stork".

I hope the above clears up a few misunderstandings you seem to have.

Yours sincerely,



Arthur Bray.

STANTON T. FRIEDMAN  
NUCLEAR PHYSICIST - LECTURER

110 KINGS COLLEGE ROAD  
FREDERICTON, NEW BRUNSWICK E3B 2E7  
CANADA

(506) 457-0232

Dear Bill:

Dec. 1, 1982

I hope that by the time you get this we have heard good news from Putnam's G & D -- meanwhile I am sure it has been rough for you settling in to your office....

I am very intrigued by the enclosure from Arthur Bray though I don't like his letter. I called him and found out

1. Harry Tokarz also contacted him about a week earlier re Sarbacher...no one else.

2. He will check his roughly 1" thick file of material from Smith's file from this time period to see if there are any other indications of with whom Smith might have been in contact.

3. As you probably already knew he did mention Sarbacher by name in his oral presentation.. which means that whoever heard you mention finding Cavitt might have heard him as well and gotten to Sarbacher.

4. I called Sarbacher on his yacht no less. Sounded vigorous and cordial. Didn't recall Smith off hand... obviously was a short conversation if his notes are accurate. Agreed to review whatever I sent him. In response to a specific question stated that no-one had approached him to shut up. His view about UFOs is that there are undoubtedly other older planets and therefore intelligent more advanced beings.

5. Sarbacher seemed to be ready to meet with me during my February Florida trip.

6. Also enclosing Vandenberg log or diary sheets for the 1948 time frame... some interesting notes.

7. Note the letter from the Paramus Klass....ugh...even using you as a reference....

8. Had a long call from an initially irate Todd Zechel. He had called Peter Gersten who mentioned my wondering about that letter to Todd being a fake... threatens to Sue Roy and you and me... Talked to Roy later who had also had an irate TZ call... Assured him that I would write a letter indicating I would not use any TZ material and would destroy what I had.... and that I wouldn't trust his material as far as I can throw it...expect you will receive a letter as I will.. says Roy. He wasn't aware of the mixup on the manuscript mailing of your stuff to somebody else.....

The Canatom local shrinkage will hurt in terms of secretarial and copy services.... besides the loss of sporadic but useful income.... damn... but the book will come through.....

Hastily,

Stan

ARTHUR BRAY  
1187 AGINCOURT ROAD  
OTTAWA, ONT. K2C 2H8  
CANADA  
(613) 225-2099

December 2, 1982.

Mr. Stanton F. Friedman,  
110 Kings College Road,  
Fredericton, N.B.,  
E3B 2E7.

Dear Stan:

Re your phone call of November 28th, there is no mention of Vannevar Bush in my W.B.S. papers, other than a reference to the magazine article partly written by Smith (See The UFO Connection, pp 61-65). Smith's papers reveal that this clearance was to be given by Bush. Incidentally, the magazine concerned was "TRUE".

Yours truly,



Arthur Bray.

ARTHUR BRAY  
1187 AGINCOURT ROAD  
OTTAWA, ONT. K2C 2H8  
CANADA  
(613) 225-2099

January 4, 1983.

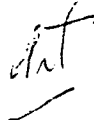
Mr. Stanton T. Friedman,  
110 Kings College Road,  
Fredericton, N.B.,  
E3B 2E7.

Dear Stan:

Thank you for your letter of December 14th. I have made an inquiry of the Navy pension office in Ottawa and was informed that Bremner is now dead, assuming it is the same guy, but there was only one Bremner in their records who was a Naval Officer (the initial being W.). They will not give out addresses. Against the rules.

The only other papers I have, identifying any people involved with Smith, are enclosed. You may, perhaps, find them helpful.

Yours sincerely,

A handwritten signature in cursive script, appearing to read 'at' or 'Art', with a horizontal line underneath.

Arthur Bray.

STANTON T. FRIEDMAN  
NUCLEAR PHYSICIST - LECTURER

110 KINGS COLLEGE ROAD  
FREDERICTON, NEW BRUNSWICK E3B 2E7  
CANADA

(506) 457-0232

Notes on Conversation with Donald Keyhoe, POB 502, Luray, VA 22835 USA,  
703-743-6909 Feb. 13, 1983

Don's memory seems not very good. Initially he vaguely remembered me and vaguely remembered Smith. Later in the conversation he seemed to have better recall of both of us. He is working on a book which is long overdue. Was sick for a while. Had moved the stuff at his office at which he hasn't been working for 7 months, into piles and out of the files. Couldn't take any time to go through things. Might be able to dig out some things from 1950-51 worried about having anyone else go through the materials because of stuff given in confidence. Not really using old stuff. Wondered if I was working on a book. Said yes-- focussing on technological ends. Mentioned Roswell Incident. Thinks he has it but doesn't remember what is in it. Vaguely recalls name Bill Moore.

Vaguely recalled Bush's name. Later said he did share materials with Smith both in the US and during a trip to Canada. Can't recall any other Canadians or working with anybody in the USA at that time. Mentioned Dick Hall. I was surprised he knew Hall back then.. maybe not that early. Still some files at NICAP.. some duplication.

I suggested visit by Moore and Friedman if we met in Washington in March. Reluctant but not final no. Concerned about getting late book done. Talked as though he wasn't really interested in old material. Probably has stuff whose significance he doesn't appreciate especially like Bray. Most of his material came from airline pilots, military and congressmen and one senator. I asked if perhaps they might be willing to talk now if not way back then... Possibly.

Frankly he sounds somewhat senile but probably has materials that would be useful if Bill and I went through them. Talked about burning the excess files.. UGH. Luray is about 1.5 hrs. from DC he says. I said I would send him some things... to try to refresh his memory. not sure just what I will send. Can I trust him? Will he talk to Dick Hall?

STF

**STANTON T. FRIEDMAN**  
**NUCLEAR PHYSICIST - LECTURER**

110 KINGS COLLEGE ROAD  
FREDERICTON, NEW BRUNSWICK E3B 2E7  
CANADA

**(506) 457-0232**

Notes Phone Conversation with Dr. Robert I Sarbacher, Feb. 13, 1983

His number is 305-833-1116. Yacht Apocalypse, 500 Brazilian Dock, W. Palm Beach 33480

I called to see if he would be in during our Florida Trip and to see if there was any reaction to what I had sent. He does expect to be in, has not really spent any time on what I sent, would be willing to talk in person about what he remembers. Is fairly easy to find and has been fighting the flu or a cold for a month.

His labs made a lot of money and he bought several of the insurance companies. I mentioned that there seemed to be a lot missing in his Who's who bio. Such as just what he was working on and for whom. He said That's because most of it was classified. He seemed a little surprised that the Guided & Missile Committee of the Research and Development Board (His involvement) was mentioned. I asked when he was on.. Early fifties maybe even late 40's. I mentioned that Bush had been chairman. He said No. not when I was on it. Karl Compton was. Compton took over in 1948. He described himself as kind of a dollar a year man on Government activities... I said a bit like Jimmy Doolittle who was a VP for Shell Oil but spent  $\frac{1}{2}$  his time working for the government. He said yes.

Coming down I-95, get off in W. Palm Beach at Okeechobee, cross bridge and make 2 right turns--first Lake Trail and after one block on Brazilian.. big hedge and right there....

He sounded in much better shape mentally than Keyhoe-- about 10 years younger. It is interesting that he didn't marry for the first time until he was about 47. He obviously had made a lot of money-- bought Wadd or Webb? Labs... Nat. Sci. Labs was very big with branches all over.. sold out.. became Bowzer?? pumps for cars.... Sort of unsung but rich.

OMOND M. SOLANDT  
THE WOLFE DEN. R.R. No. 1  
BOLTON, ONTARIO LOP 1A0

May 11, 1983 .

880-4981  
TELEPHONE ~~XXXXXX~~  
(AREA CODE 416)

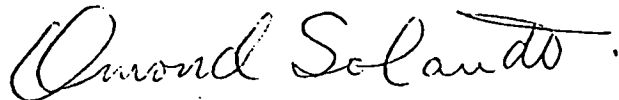
Mr. William S. Steinman  
15043 Rosalita Drive  
La Mirada, California  
90638  
U.S.A.

Dear Mr. Steinman:

This is in reply to your letter of April 19 concerning the work of Mr. Wilbert B. Smith. Although I had several discussions with Mr. Smith he dealt mainly with Dr. Frank T. Davies, Superintendent of the Telecommunications Research Establishment of the Defence Research Board. As you say, he kept his work mainly within the Department of Transportation but DRB did provide him with facilities for some of his work. At a later stage the key experiments in his magnetic theory were repeated jointly by Mr. Smith and Dr. Davies using much more sophisticated techniques than he had originally used. The results of these experiments suggested that his original ideas had been based on faulty measurements and that the hypothetical repulsion system that he had envisaged was not workable.

I left defence work in 1956 and have not been in close touch with recent developments. I do not share your faith in the existence of UFO's but have consistently tried to retain an open mind and to wait and see. I am still waiting. Good luck with your work.

Yours sincerely



O. M. Solandt

OMS/jmj

OMOND M. SOLANDT  
THE WOLFE DEN, R.R. No. 1  
BOLTON, ONTARIO LOP 1A0

TELEPHONE 594-4981  
(AREA CODE 416)

August 26, 1983

Mr. William S. Steinman  
15043 Rosalita Drive  
LaMirada, California  
90638  
U.S.A.

Dear Mr. Steinman:

This is in reply to your letter of August 10. I reply to your numbered paragraphs in which you relate interesting information that you have recently 'dug-up':

1. I do not recall any formal team under Dr. Vannevar Bush dealing with flying saucers. I do recall the subject coming up informally in the course of discussions which we held fairly regularly.
2. The memo that you refer to was written by Wilbert B. Smith and was presumably classified by him. Mr. Smith did frequently discuss flying saucers both with me and with other more knowledgeable members of my staff.
3. As far as I am aware no non-U.S. citizen was allowed access to any material classified higher than top-secret.

As I mentioned in my previous letter DRB did work with Wilbert Smith in testing his theories of ~~on~~<sup>electro</sup> magnetic propulsion. The results were negative. I am sure that these were discussed informally with Dr. Bush but I do not recall any formal report.

Yours sincerely



O. M. Solandt

OMS/jmj



Friday  
Aug. 26/83.

Mr. Steinman your most interesting letter was delayed as I have been away.

I knew nothing of your news re. Wilbert's interview. With I guess was more involved than I realized.

I am not surprised if the Americans could not discover the mechanism of the saucers. I know they found a monitor & had a very difficult time getting it open - & then couldn't realize the workings - a new kind of tape recorder. They never sent it - as far as I know - to Wil but they did inquire if he knew anything about them.

At the time With was involved we were very busy in our community as we wanted to prove we were two sane normal people.

With was elected a Trustee on the Pchia Village Board & I taught dancing in our basement - so we were both "meeting" natives of our Village" & established our sanity.

2

It didn't leave much time for either one of us to get into the other's enterprises,

Wit chased every opportunity to meet anyone with hopeful information. It was a very interesting time for us both.

I wish I could give you more definite further information but I know that is why Wit never kept me too well posted re his thoughts as I'm no engineer & I could easily misconstrue the truth.

I am considering a trip to Calif. in Feb. next & it's with a girl friend - I'm not sure where her sister lives - but I'll take your mailing address & try to get in touch with you.

Sincerely,

W. Paul Smith

William S. Steinman  
15043 Rosolita Dr.  
La Mirada, Calif.  
90638

William L. Moore  
4219 W. Olive  
Suite 247  
Burbank, Calif.  
91505

February 14, 1984

Dear Bill :

I recorded (copied) the tape and am returning it to you. (Thanks). Also, enclosed, you will find a copy of that letter from Murl Smith to myself on 8-26-83.

Please keep in touch, it has been nice working with you on these C/S cases.

I think that Friedman is a bit overly suspicious of me, thinking that I was interviewing and writing to Sarbacher, for Zeche's sake. Hog wash!!

Enclosures

- ① Tape
- ② Letter

Very Sincerely  
Wm Steinman

William S. Steinma  
15043 Rosalita Dr.  
La Mirada, Calif.  
90638

Dr. Robert I. Sarbacher  
c/o 150 Australian Ave.  
Palm Beach, Florida  
33480

(my 4<sup>th</sup> Letter to  
Sarbacher  
2<sup>nd</sup> and 3<sup>rd</sup> were  
Just short memmo's  
wd)

Sept. 12, 1983

Dear Dr. Sarbacher:

This is a follow-up to my letters and Telephone conversations to you, dated 5-18-83, 6-15-83, 7-31-83(Tek) 8-10-83, and 8-28-83(Tele). During that last telephone conversation to you on 8-28-83, you asked me just exactly what I want pertaining to those recovered flying saucer cases.

Dr. Sarbacher, as I stated in my first letter on 5-18-83, I need the following information from you, if at all possible:

① relate your own experience as pertaining to your own involvement with these recovered Flying Saucers - Description of

②

Saucers, occupants, names of others involved, places of recoveries, dates of recoveries, etc.

② Verification that the persons listed, were involved.

- ① Thomas Townsend Brown
- ② Dr. Weisberg
- ③ Hellmut Schmidt
- ④ Dr. Robert H. Kent
- \* ⑤ Dr. John Von Neuman
- ⑥ Dr. Wernher Von Braun
- ⑦ Dr. Francis Bitter
- ⑧ Dr. Leo A. Ge Baver
- \* ⑨ Dr. J. Robert Oppenheimer
- ⑩ Dr. Eric Henry Wang
- \* ⑪ Dr. Vannevar Bush.

③ A copy of the official Govt. report pertaining to the Aztec, New Mexico recovery, or any other that you might have access to.

④ Copies of the Photographs of the recovered Flying Saucers both at the "Crash-Site" and

at the laboratory, and Photogrep  
of the occupants of these  
Flying Saucers-

- ⑤ Copies of the Official Analysis  
reports both on the Saucers  
and the occupants.

Please review the previous letters-  
and get in touch with me as  
soon as you possibly can on this  
very important matter.

Very Sincerely Yours  
Wm Steiman



William S. Steinman  
15043 Rosalita Dr.  
La Mirada, Calif.  
90638

Stanton T. Friedman  
110 Kings College Rd.  
Fredericton, New Brunswick  
Canada  
E3B 2E7

March 28, 1984

Rec 3/26

Dear Stan:

I received a letter from Fred Darwin of Dallas, Texas, in which he laid down the history of N.D.R.C.-O.S.R.D. as it became J.D.R.B. and eventually ended up becoming R.D.B. He gave me names of persons whom he considered to be the most likely candidates for team members on a Flying Saucer recovery operation - "if there were ever such a happening". They are as follows:

- ① Dr. Vannevar Bush
- ② Dr. Karl T. Compton
- ③ Dr. Lloyd V. Berkner
- ④ Dr. Robert F. Rinehart
- ⑤ Dr. Eric A. Walker
- ⑥ Dr. John von Neumann



2

I did some library research on each name, xeroxing a biography of each individual, and looking up their descendants in local area telephone directories.

Stan, I believe that the name of that individual, whom Sarbacher mentioned as attending all of the meetings pertaining to recovered Flying Saucers, is Dr. Eric A. Walker.

Remember Sarbacher stating (more let me hear that tape recording) that this man came from Pennsylvania and wrote a book on Electrical Engineering; well Walker, at that time, was President of Penn State university, was formerly head of Penn States electrical Engineering Dept., wrote a book on Electrical Engineering, and was a consultant (dollar a year man) to J. R. D.B. 1949-1951. He also was in charge of a Naval laboratory that was developing electronically Sonar guided Torpedos - which were consequently showing very positive results against the Japanese during WWII.

The last residence that I have for him is as follows:

903-691  
4375  
814-  
865-4700  
865-1831 - Donna-  
814- no L.

Dr. Eric A. Walker  
Rock Springs Farm Pennsylvania  
Furnace, Pennsylvania  
16865

I suppose that Moseley contacted you as pertaining to Dr. Robert I. Sarbacher. This only proves one thing to me; Moseley is just as interested in the Crash-Recovery cases as he was in 1954.

Stan, I am not doing research for Todd Zechel, altho I did have an earlier run-in with him, which I later regreted. My main goal is to solve the Flying Saucer Enigma, through the recovery and attempted duplication cases.

Please let me know what you find out through Dr. Walker, and do keep in touch.

PS. Stan, can you Very Sincerely  
Tell me anything about Wm Steinman  
the "Cosmos" club in  
Washington D.C. - Everyone  
of these Scientists were a  
member.

Notes on discussion with Sarbacher. 8/5/85  
 305-833-1116  
 333 Sunset Ave, Palm Beach  
 150 Australian Ave, Palm Beach

I explained to him that I was interested in UFOs from the scientific and historical standpoint. I couldn't locate records because of changes in recording systems. I explained the problems of archival research. He got the point that we need a place to start....project name, code number, person, etc.

He said Vannevar Bush would be a great help if still alive...asked if he died. Said Bush was science advisor to Truman.

He said the people who were associated with the Research and Development Board (RDB) have scattered over the world. Working for the RDB was not a regular job for him. The RDB had a lot of power in those days, like a little Presidential Cabinet. (That's why it was a dollar a year job (for him) (note: gave him prestige and also a clearance). Run by Carl Compton, former president of MIT, good friend of Eisenhower. It was set up by him. That is what OI was associated with around 1950 or a little later, he says.

Regarding himself: "There is something I should have done but didn't do. I had had a request to visit a site...(thinks request came from Wright Field or that the site was Wright Field)...regarding a fallen...a UFO and at that time could not go....tied up with personal business. But some of the men did go. Our headquarters were in old Navy temporary buildings on Constitution Ave. Some of the men went. I went to the office some time after they got back and talked to some of the guys who saw it. I wish I could have gone."

He was a evidently a consultant in missile guidance and worked only occasionally on special problems. He was on the guidance and control committee. He had his own private business... a small laboratory. He did work for the government from time to time but still had to run his own lab. "I can't remember some of those guys. they were at least 30 years old at the time, maybe some around 40 or 50. Some of them must be around. You should try to contact them."

Bletchman called him after the OMNI article came out and asked if he would be willing to talk to people. He said he was being asked constantly about the stuff in the letter to Steinman. He keeps getting letters constantly from people who write sensational UFO stories. Sometimes they come by and see him. When he gets a chance he answers letters.

I asked him to relate his impression of what the men told

him they saw at Wright Patterson.

"My impression of what the men said who took the trip to Wright Field: the 'people' who operated those things were built different than we, they seemed to have no inertia, seemed to be like insects, maybe they were robots (this seemed to stick particularly in his mind)...that was all that was said .. (or all he could remember).

Problem is to find out who was on the RDB in those days... thinks it was Eisenhower who set it up and was killed by the next president

Thinks it was killed by Johnson.. not Kennedy who was a good friend of Sarbacher... Kennedy better educated... Johnson was nastier and less well educated. Kennedy an all American Boy... Johnson may have killed the RDB. It was a good idea...seems like Republicans have better educated cabinets, more imaginative.

Didn't know Wilburt Smith..or at least didn't seem to remember the name...said there were a lot of guys back then who talked to him....and has never read any UFO book including the ones written by people who have talked to him.

Said he would call me if he thinks of more (I gave number).

(NOTE: He died in the summer of 1986. Never did call back.)

PO Box 266  
Oroville WN 98844

Ph. 604-493-6512

FAX 604-493-0979

Sept. 23, 1992

Wm. L. Moore, Ed. FAROUT

Dear Mr. Moore;

Following the trail of one Canadian scientist who studied UFO propulsion leads to Australia and tales of threats against a man's family.

As you probably know, the late W. Smith was an electronics/radio scientist back in the 1950s when he was commissioned by the Canadian government to investigate the UFO problem. Among other aspects, his research was directed into finding out how UFOs operate.

His theory was that the UFOs generate a "magnetic sink" in Earth's magnetic field, providing inexhaustible free power and levitating reaction forces.

You have also probably heard that a recently-surfaced copy of Smith's original reports indicates he had built a working model of his "magnetic sink".

The mystery is: what became of Smith's working model? And did he ever build a larger unit, as was his stated intent?

I have the contacts in the "free energy" community in Canada to follow up on this story. Would FAROUT be interested?

\*\*\*\*\*

Alternate query: would FAROUT like an article on the "anti-gravity" work of John Hutchison of Vancouver BC? I wrote the enclosed article requested by Electric Spacecraft Journal under less than optimal conditions, and they further shortened it, as well as changed names. The result was rather choppy writing. I can do much better.

As a professional journalist (feature writer for a daily newspaper, freelance magazine writer, fiction writer etc.) I CAN write in FAROUT's light, sceptical, hip style.

I'm usually the only journalist at the non-conventional science meetings I attend, such as Swiss Assoc. for Free Energy symposium in 1988; Hans Neiper's Gravity Field Energy Assoc. meeting in 1987; Planetary Assoc. for Clean Energy; Tesla symposia, etc.

And I take photographs. I'm hoping we can work together.

Sincerely,  
Jeane Manning

make use of environment or resources which are unique to place research projects where they can be carried out most effectively, whether in DRB establishments, other Government departments, universities, or industry, maintain flexibility in programmes as events may warrant, place the research emphasis on the medium and long-range elements.

therefore, and only as a broad generalization which will contain amount of overlapping and some exceptions, it is defence research projects will be allocated in three different research is likely to go to universities, some other Government and to certain DRB establishments; applied research is carried out in large part within the laboratories of the Research Board; and engineering development is likely to be Canadian industry.

have now seen, in some detail, what has happened within the first ten years of its existence, and we have considered influence and the interrelationships of the Defence Research Department of National Defence, other Government Canadian industry, Canadian universities and the defence and programmes of this country's major allies. From all of this it emerges that the Defence Research Board is now a vitally factor in Canadian defence and in Canadian scientific life. The which have guided the Defence Research Board have been it has been seen that not even such principles are necessarily finally we have ventured to hazard some sort of guess at too-distant future is likely to hold for DRB.

as, of course, are at the best a risky business. Trends which apparent today and which appear to be in full flood have an habit of trickling out into nothingness amid the sands of And conversely new considerations which today cast no e them may later arise to dominate the situation and make our most confident forecasts. We have, in fact, a firm grip e past. But when that past has been as good and as full ivement as the past of the Defence Research Board there is to be confident of the future. There is thus little doubt ence Research Board will move forward and change with times, being constant only to its aim of providing the ned Forces with the best scientific support which can be had.

*Carroll*

## APPENDIX "A"

### DEFENCE RESEARCH BOARD MEMBERS

From To

Vice Admiral H. E. Reid..... April 1, 1947 August 31, 1947

Dr. O. M. Solandt..... April 1, 1947 February 28, 1956

Gen. C. Foulkes..... April 1, 1947 January 31, 1951

Air Marshal R. Leckie..... April 1, 1947 August 31, 1947

Mr. W. G. Mills..... April 1, 1947 December 31, 1948

Dr. C. J. Mackenzie..... April 1, 1947 March 31, 1952

Dr. C. H. Best..... April 1, 1947 March 31, 1960

Dr. P. E. Gagnon..... April 1, 1947 March 31, 1949

Dr. Otto Maass..... April 1, 1947 March 31, 1951

Col. R. D. Harkness..... April 1, 1947 March 31, 1949

Dr. J. H. L. Johnstone..... April 1, 1947 March 31, 1956

Dr. G. M. Shrum..... April 1, 1947 March 31, 1950

Vice Admiral H. T. W. Grant..... September 1, 1947 March 31, 1954

Air Marshal W. A. Curtis..... September 1, 1947 November 30, 1951

Mr. C. M. Drury..... January 1, 1949 March 31, 1955

Mr. H. Greville Smith..... April 1, 1949 March 31, 1952

Dr. R. F. Farguharson..... April 1, 1949 March 31, 1952

Brig. F. C. Wallace..... April 1, 1950 March 31, 1953

Dr. A. E. Cameron..... April 1, 1950 March 31, 1953

Mr. E. L. Davies..... December 1, 1950 December 31, 1954

Dr. A. R. Gordon..... April 1, 1951 March 31, 1954

Vice Admiral E. R. Mainguy..... December 1, 1951 December 31, 1955

Lt.-Gen. G. G. Simonds..... February 1, 1951 August 31, 1955

\*Mr. A. H. Zimmermann..... February 1, 1952

\*Dr. E. W. R. Steacie..... April 1, 1952

Dr. L. C. Simard..... April 1, 1952 March 31, 1955

Mr. H. G. Welsford..... April 1, 1952 March 31, 1955

Dr. H. D. Smith..... April 1, 1953 March 31, 1956

Dr. R. C. Wallace..... April 1, 1953 (deceased 1955)

\*Air Marshal C. R. Slemmon..... April 1, 1953

## Appendix "A"

### DEFENCE RESEARCH BOARD MEMBERS—continued

	From	To
Mr. R. W. Diamond.....	April 1, 1954	March 31, 1957
*Mr. R. M. Brophy.....	January 1, 1955	March 31, 1958
Dr. H. G. Thode.....	April 1, 1955	March 31, 1958
Dr. L. P. Dugal.....	April 1, 1955	
*Mr. F. R. Miller.....	August 1, 1955	
*Maj. Gen. H. D. Graham.....	September 1, 1955	
*Vice Admiral H. G. DeWolf.....	January 1, 1956	March 31, 1959
Dr. W. J. Archibald.....	June 7, 1956	March 31, 1959
Mr. H. H. Lank.....	June 7, 1956	March 31, 1960
Dr. T. Ingledow.....	April 1, 1957	
*Dr. J. E. Keyston.....	June 1, 1957	July 31, 1960
Dr. G. S. Field.....	August 1, 1957	

### SECRETARIES

Mr. R. G. MacNeill.....	August 1, 1947	September 30, 1949
Mr. W. H. Barton.....	October 1, 1949	June 30, 1952
Dr. J. Clunie.....	July 1, 1952	July 31, 1953
Mr. A. M. Pennic.....	August 1, 1953	July 31, 1954
Dr. R. Marineau.....	August 1, 1954	May 31, 1955
†Mr. G. W. Dunn.....	June 1, 1955	

\*Member—Ex officio

†Present Secretary DRB

## APPENDIX "B"

### PAST AND PRESENT CHIEF SUPERINTENDENTS AND SUPERINTENDENTS

#### NRE

Dr. G. H. Henderson.....1947-1950  
 Dr. J. H. L. Johnstone.....1947-1950  
 Dr. J. E. Keyston.....1950-1957

#### CARDE

Dr. D. C. Rose.....1946-1947  
 Dr. W. B. Littler.....1947-1949  
 Professor Carleton Craig.....1949-1952  
 Dr. H. M. Barrett.....1952-1955  
 Brigadier D. A. G. Waldock.....1955-Present

#### GIES

Director of Projects,  
 Dr. C. A. Mitchell.....1949-Present

#### DRCL

Dr. E. A. Flood.....-1947  
 Dr. J. R. Dacey.....1947-1949  
 Dr. J. C. Arnell.....1950-1954  
 Dr. Harry Sheffer.....1954-Present

#### DRKL

Dr. G. B. Reed.....1947-1955  
 Dr. Harry Sheffer.....1955-Present

#### DRTE/RPL/EL

F. T. Davies.....1947-1955  
 J. C. W. Scott.....1955-Present

#### ORG

Dr. N. W. Morton.....1947-1952  
 Dr. J. W. Abrams.....1952-1954  
 Dr. William Petrie.....1954-Present

#### DRML

Dr. M. G. Whillans.....1948-1955  
 Dr. E. A. Sellers.....1955-Present

#### DRNL

Dr. K. C. Fisher.....1949-1951  
 Dr. D. B. W. Robinson.....1951-1954  
 A. M. Pennic.....1954-1956  
 Officer-in-Charge,  
 Albert E. Cooney.....1956-Present

SES

E. L. Davies.....1941-1947  
 Dr. H. M. Barrett.....1947-1949  
 Dr. E. A. Perren.....1949-1951  
 Dr. H. M. Barrett.....1951-1952  
 Dr. G. O. Langstroth.....1952-Present

PNL

Dr. F. H. Sanders.....1948-1953  
 J. S. Johnson.....1953-1955  
 Dr. W. L. Ford.....1955-Present

DRM (London)

Col. G. M. Carie.....1947-1951  
 Brigadier G. P. Morrison.....1951-1955  
 E. L. Davies.....1955-Present

DRM (Washington)

A. L. Wright.....1947-1953  
 Brigadier H. E. Taber.....1953-1955  
 Dr. J. J. Green.....1955-Present

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As seen previously, I was successful in tracking down dormant files in both DOC and DND, as well as current files.

In a letter from the Department of External Affairs, I was informed that "the Canadian Government does not underestimate the seriousness of the question of UFOs and this matter is being kept under consideration and study in a number of departments and agencies".<sup>25</sup>

Why the apparent lack of interest in UFOs by the Ministry of Transport? Why the "disappearance" of secret files? Why was I given such a run-around in trying to uncover the contents of government files on UFOs?

I am thoroughly convinced that the Government of Canada was engaged in a cover-up operation. Of course, the lack of information could simply have been incompetence and plain bumbling on the part of all Ministers of the Crown and public servants concerned, but I cannot honestly believe that all the high officials I contacted were really that incompetent. The only explanation, in my view, is a deliberate cover-up. My many years of badgering the government on this leaves me no alternative conclusion. For a number of years I deliberately avoided such a conclusion in the hope that I was wrong. I can no longer avoid it.

Cover-up of UFO facts is not unique to Canada. It exists around the world and a very large number of documents have recently been released by the FBI and CIA in the U.S.A. under the Freedom of Information Act, which is positive proof of secrecy having been maintained over a period of thirty years.

Ufologists are familiar with the case of a 3000 pound mass of metal reported to have fallen from the sky under very strange circumstances near Les Ecoreuils on the St. Lawrence River in 1960. Government scientists are the first to admit this was not a meteorite and claim it is foundry slag.<sup>26</sup> However, at least eight separate analyses have been undertaken on samples of this metal and all results differ significantly. One university professor said he was "disturbed" by the results. A full report of this interesting case, written by myself, will appear soon in the *Encyclopedia of UFOs* to be published by Doubleday (New York).

Much interesting information has now been brought into the open, however, with the release of the Canadian Government files referred to. More facts from these files will be brought to light in the next chapter.

## CHAPTER 7

### PROJECTS MAGNET AND SECOND STOREY

"We are faced with a substantial probability of the real existence of extraterrestrial space vehicles" was the conclusion of a leading Canadian radio engineer in his report on a three year study of UFOs.

Established in 1950 by the Department of Transport, PROJECT MAGNET was the first Canadian government investigation into UFOs, according to available records. It was under the direction of Mr. Wilbert B. Smith, Senior Radio Engineer, Broadcast and Measurements Section of that Department. Mr. Smith was already internationally recognized in his field of radio communications, held a number of patents and had received a number of awards for his work in radio. He was a graduate of the University of British Columbia, having received both the B.Sc. and M.Sc. degrees in Electrical Engineering. He had represented Canada at the Canada-U.S. FM Broadcasting Agreement in 1947 as well as at other international conferences. He was in charge of establishing a network of ionospheric measurement stations throughout Canada.

Project Magnet was a small program using Department of Transport (DOT) facilities with the assistance of other government organizations including the Defence Research Board (DRB) and National Research Council (NRC).

Much has been written and spoken about Project Magnet over the years but a large proportion of this has been misleading, incomplete or inaccurate. In this chapter I will attempt to set the record straight, using official government documents as sources of my information. The information in some of these documents has never before been made public.

In addition to the government files I have reviewed, I have been privileged to obtain certain other material and information for which specific references cannot be cited due to the need to protect my sources.

The project was an outgrowth of work already being done by Smith and a small group of engineers on the collapse of the Earth's magnetic field as a source of energy. It was believed that



Wilbert B. Smith

"Flying Saucers" were operating on magnetic principles and it seemed that this work might explain the saucers' operation. Smith had been informed by highly-placed sources that flying saucers are indeed real, that they are almost certainly of extraterrestrial origin and that they operate on a magnetic principle. Just how this principle actually operated was unknown.

Early in 1950, a book by Frank Scully (*Behind the Flying Saucers*) claimed that flying saucers had crashed in the USA and that the US Air Force had retrieved them along with the dead bodies of their occupants. Although some people have claimed that Scully's book was a hoax, Smith was informed by a certain top American Scientist who was deeply involved in UFO research for the US Government, that "the facts reported in the book are substantially correct."

On November 21, 1950, Smith submitted a proposal to the Controller of Telecommunications to set up a special project within the Department. He stated in his proposal that his group believed they were on the track of something which may well prove to be the introduction to a new technology. It appeared that their work in geomagnetics might well be the linkage between our technology and the technology by which the saucers are designed and operated.

The study of UFOs, or flying saucers as they were called in those days, was of tremendous interest at top levels of the US Government, and Smith was informed that the matter was the most highly classified subject in that government, rating higher even than the H-bomb. Top officials were aware of their reality, he was also told.

Smith had discussed the work of his group with Dr. O. M. Solandt, Chairman, Defence Research Board, who agreed that work on geomagnetic energy should go forward as rapidly as possible and offered full co-operation of his Board, according to Smith's proposal.

The project was classified, and for several reasons. The exchange of information with other parallel classified projects could thereby be facilitated; scientific personnel working along unorthodox lines prefer to work in camera until their results can be proven; and furthermore, in the event that a new technology should be uncovered, its implications would have to be carefully assessed before pertinent information could be made public.

The truth of the matter seems to be that North American Ufologists, in general, have ignored this work by Constable. How do we know if his work is accurate, and truthfully reported, without attempting to repeat it? We have tended to assume it is all nonsense, and ignored it. I congratulate those few who have pursued this matter. It seems that Ufologists generally have considered Constable's theory and work to be too "far out" to warrant serious consideration. Can anything really be too "far out" in Ufology?

Eighteen years after his first book was published, (reference 5) during which interval we ignored him, he followed up with a second book. (Reference 6). This has also been generally ignored. Now Constable has retired from Ufology. (Reference 7). Could it be that he got tired of his work being ignored? As he said "No more UFO research....let somebody else do it. I've given the public an overdose so it'll take another twenty years to go down." (Reference 8).

In September 1978 I wrote to one of the leading UFO organizations in the U.S.A. suggesting they undertake a research project to verify Constable's work. Where is the indication that this has been done? My suggestion was evidently ignored. It happens that our Italian friend previously referred to submitted his photographic evidence to the same organization in July 1978 and as of December last had also not even received a reply, although he did receive confirmation from an independent source that his letter and photo had in fact been received. (Reference 9).

Two other examples of failure to pursue new leads involve some information divulged by myself in my second book. (Reference 10).

First, I referred to a Project Stork in the U.S.A. which was identified in a Canadian government report on UFOs to which I acquired access. We are all well aware of Projects Sign, Grudge, Bluebook and Twinkle. But Project Stork? It obviously existed as it is mentioned in this official Canadian government document, a copy of which is in my possession. If anyone has pursued this matter to find out more about it, why has it not been reported in the literature? I can only assume that this item of new information has been taken with the proverbial grain of salt.

Secondly, we have the matter of the famous (or infamous) Frank Scully who created a sensation in 1950 with his startling book. (Reference 11). All sorts of reports have appeared over the intervening years stating that this book has been proved to be a hoax, that Scully admitted it was a hoax, etc. (Reference 12). So everyone now accepts that as fact. However, I also reported in my book (reference 13) that just shortly after the appearance of Scully's book, Wilbert B. Smith, the late great Canadian Ufologist, was informed by a top American scientist who was deeply involved in UFO research for the U.S. Government, that "the facts reported in the book [Scully's] are substantially correct". The notes made by Smith recording this interview are in my possession. No one has contacted me for further information on this

gem in order to pursue it. This statement was made by this top scientist in a key position to know. Perhaps, just perhaps, the admission by Scully (if he in fact admitted a hoax) and all the other stories, may be false. Or maybe pressure was applied to Scully to force an admission. It has happened before. Do we know for a fact that Scully's story is untrue?

Although it appears that many of Scully's details were untrue, such as Silas Newton possessing pieces of a saucer, etc., perhaps the basic story of a crashed saucer itself is true. It may be more than mere coincidence that twenty-seven years later, Stringfield and Zeckel uncovered independent claims by apparently reputable people concerning a saucer crash in New Mexico. These reports, if true, could vindicate Scully. (References 14 and 15). I agree with Stringfield where he says "Perhaps we should take another look at Scully and his book....".

If anyone out there has sufficient interest to pursue this matter, the scientist who made that startling statement was Dr. Robert I. Sarbacker, Dean of the Graduate School at Georgia University. and Director of Research, National Science Laboratories Inc., Washington, DC.

The foregoing examples clearly demonstrate how facts are ignored when it is thought they don't "fit in". If we are going to be truly professional, we have got to improve the quality of our research, and that includes not sweeping facts under the rug just because we may not like them. This sort of thing often occurs because of the will not to believe. A new fact comes along, which does not fit in with our present knowledge, so we don't believe it, and cast it aside. We must be more objective and take a mid-way view, neither believing nor disbelieving. One extreme is as bad as the other. But the next step is to follow-up, to find the truth of the matter, rather than ignoring the misfitting facts.

Another example of lack of professionalism pertains to Len Stringfield and his Crash/Retrieval Syndrome. Stringfield deserves high praise for his work, which is still in progress, in uncovering so many leads. Yet, before he has even completed his work, we have the critics biting at his heels. I won't mention names as those who are familiar with the literature will know who I mean. If they must attack him, why can't they at least have the courtesy to wait until he has completed his research, and then try to prove him wrong? Stringfield has performed a great service and he has been most courteous in providing progress reports for the Ufological community. I suspect that most, if not all, those who will not accept that military personnel can keep quiet (particularly retired military personnel) have never served in the military, or if they did, were never privy to highly-classified information. I know that such people can keep quiet, having served in the military myself for twenty-eight years and having for a part of that time the highest security clearance possible. Secrets can be, and are, kept, let me assure you. So let's stop sniping at Stringfield and help and encourage him to get on with his work so that he can complete it.

G. BAKER'S N.L.

during his stay in that area. I understand Dallas was the next major stop. My dad died under somewhat mysterious circumstances just a few months after Kennedy. I was quite verbal at the time, and feel I just narrowly missed personal harm. I do not wish to open that area up again.

Very truly yours, (Name withheld)

#### Leading Scientist Tells All

Dear Gray:

I recently received a letter from a currently prominent and very active scientist, who presides over a major American university. This scientist acknowledged that the United States Government DID RECOVER THREE FLYING SAUCERS between 1947-50.

He named names, gave descriptions, told dates and places of meetings (which he attended) pertaining to these recovered Flying Saucers. The purposes of these meetings were to determine:

1. Just exactly what they did recover.
2. Who manufactured them.
3. Where they came from.
4. How much the American public should know concerning this.

The outcome of the meetings:

- (1) We do not know what we have.
- (2) We do not know who manufactured them.
- (3) We do not know where they came from.
- (4) The subject matter was to remain the most highly classified subject matter in these United States.

Hence certain diversionary measures were set up to draw public attention away from the truth pertaining to Flying Saucers:

1. Sign, Grudge, Bluebook.
2. Robertson Panel, Condon Study.
3. Civilian study groups, etc.

Now, because of what this scientist says, "The cat is out of the bag." In a few short months the 35-year-old security lid will be lifted, the public will know the truth, and perhaps a new "Pandora's Box" will be opened. But this is what we all have been anxiously waiting for these past 35 years. Now, we must determine where we go from here.

Please publish this in your next NEWSLETTER.

William S. Steinman, 15043 Rosalita Dr., La Mirada, CA 90638.

I am looking for a book, The Impending Golden Age, by the Sanctilean Syntonium, Trails Press, Coolidge, AZ, 1958.

In this book Benjamin Franklin who was a Mason set the date for the end of the world at 1983:

2520 Years

-537 B.C.

1983 A.D.

Sincerely, Raymond Earl White, 213 North Wellington St., South Bend, IN 46619.

Can anybody help Mr. White? The only thing from Sanctilean in my library is a booklet titled Flying Saucers - Portents of These Last Days. - G.B.

#### Saucer Smear

I agree with much of the text in Issue #18 which praised the literary and intellectual level of James W. Moseley's publication, Saucer Smear. I also enjoyed the rest of it, though most readers will not get the point of the ridiculous claims made about Moseley's alleged intelligence background. It takes a bit of perception to see through this:

Moseley has recently purchased a large, two-story building in Key West, Florida, and is converting the top floor into antique shop known as Rose Lane Antiquities. This is way off the beaten track for a successful antique shop. It sounds to me like an excellent "storefront" cover for an intelligence operation.

Very truly yours, (Name & address withheld)

Dear Friends:

I suppose we (of the old UFO gatherings or meetings) - those of us who attended the lectures, believed the same and are still living - may not be remembered by writers as yourself. These people may have been forgotten, and since it's been long, some have passed on. They were very concerned and looked up into the night sky, some not caring if they originated over the mountain in some hidden place or otherground. They knew there was some truth about it all and felt like not being left out of progress. It is too bad those of the past could not have stopped aging, but carried on in their hopes and plans with future generations. Many lost faith when a big hushup came along. But now, when much news tells the public more on outer space, the young are taking an interest.

Will be writing, C. A. Gabaldun, Box 776, Paramount, CA 90723.

#### NATIONAL UFO CONFERENCE

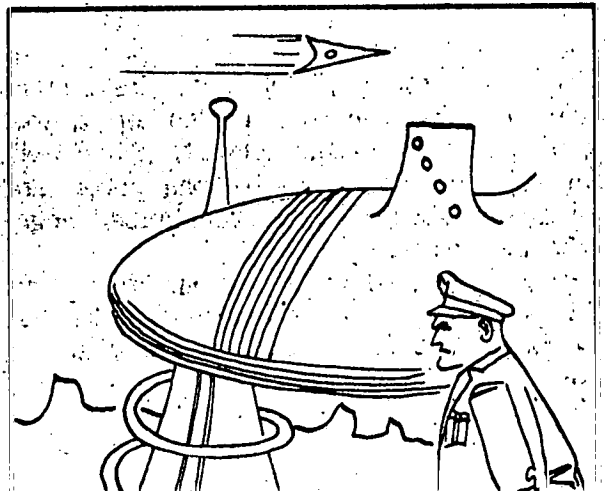
The 21st Annual NATIONAL UFO CONFERENCE will be hosted by the United Aerial Phenomena Agency (UAPA), the weekend of Sept. 22, 1984, at the Country Inn, 4181 W 150th, Cleveland, OH 44135. The Country Inn is at I-71 and W. 150th, just 3 minutes from Cleveland Hopkins Airport.

UAPA will host a UFO Banquet on the evening of Sept. 21 at the Inn; a Closed Session from 1 to 4 p.m. and a Public Session from 7 to 11 p.m. on Saturday, Sept. 22, also at the Inn.

Write: Convention Headquarters, 3001 Colburn Ave., Cleveland, OH 44109; or telephone (216) 741-9388.

#### AUCTION: GOVERNMENT SURPLUS

Miscellaneous lots of: Circular airfoils, unassembled ca 1950; Simulated rigid aircraft 150 ft. x 20', folds to go on trailer truck (not included); 32 Mannequins, small, children-size 4' (facials need repainted); 1 lot Mens' suits, asstd. sizes, black; More too numerous to mention. Wednesday, June 6, 1:00 - 5:00 p.m. J. L. Crater, auctioneer, 524 Rose Lane, Key West, FL 33040.



STANTON T. FRIEDMAN  
NUCLEAR PHYSICIST - LECTURER

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SARBACHER, ROBERT IRVING, scientist; b. Balt., Sept. 6, 1907;  
Joseph Conrad and Georgiana (Duffy) S.; diploma Balt. Poly. Inst.,  
1926; student Johns Hopkins, 1928; Sc.B., U. Fla., 1933, E.E., 1931;  
grad. Princeton, 1934; Sc.M., Harvard, 1936, Sc.D., 1939; m.  
Elizabeth Kampmann Brown, 1934 (div. 1963); 1 dau., Roberta; m.  
3d. Betty Lou Spencer (div. 1971); 1 stepdau., Daonn; 1 son, Robert;  
m. 3d. Mary Frances Phillips Turner, Sept. 1975; 1 stepdau., Mary  
Frances Turner. Instr. physics and communications engring. Harvard,  
1936-40; prof. elec. engring. Ill. Inst. Tech., 1940-42; sci. cons. Navy  
Dept., Washington, 1942-45; instr. Radcliffe Coll., 1937-39; vis. prof.  
Harvard, 1947; dean Grad. Sch., Ga. Inst. Tech., 1945-49; chmn. grad.  
council, mem. adminstr. council and exec. com., 1945-48; pres., dir.  
Washington Inst. Tech., 1950-; Nat. Sci. Labs., Inc., 1949-54; pres.  
Gen. Sci. Corp.; pres., dir. S.W. Union Life Ins. Co., United Fed. Life  
Ins. Co., United Life Ins. Co., Home Fidelity Life Ins. Co.; dir.  
research Bowser, Inc., Chgo., Johnson Fare Box Co., Chgo.; Gudeman  
Co., Chgo., Joseph Weidenhoff, Inc., Algona, Iowa, Electrofile Corp.,  
N.Y.C., Briggs Filtration Co., Washington (1949-54); dir. research  
div. Prosperity Co., Syracuse & N.Y.C.; dir. research Bogue  
Investment Corp., El Segundo, Calif., 1969-; professorial lectr.  
George Washington U.; dir. Robert I. Sarbacher & Assos., Atlanta and  
Washington; cons. scientist, dir. Wedd Labs., Inc., Washington,  
1948-49. Sci. cons. guided missiles com. Research and Devel. Bd.  
Dept. Def. Trustee Ga. Tech. Research Found., 1946-48; instrnl. rep.  
Oak Ridge Inst. Nuclear Studies, 1946-48; mem. adv. council WAA,  
1947; bd. dirs. Nat. Patent Council, Recipient citation for edn.  
institutional program WAA, 1947. Prof. engr., Fla., Washington,  
1950. Mem. Am. Acoustical Soc., I.E.E.E., N.E.A., Am. Math. Soc.,  
Harvard Engring. Soc., N.A.M., Am. Soc. Engring. Edn., Soc. Am.  
Engrs., A.A.A.S., Am. Phys. Soc., Phi Beta Kappa, Kappa Sigma,  
Sigma Tau Clubs: Harvard, Princeton, Lotus (N.Y.C.); University  
Engineers, Cosmos (Washington); Author: Hyper and Ultra-High  
Frequency Engineering, 1944; Research Accrediting at Military  
Establishments, 1946; Ency. Dictionary for Electronics and Nuclear  
Engineering, 1955; Biomedical Engineering (in preparation). Sci.  
story collector. Home: 150 Australian Ave Palm Beach FL 33480  
and Yacht Apocalypse-Brazilian Dock Palm Beach-FL 33480

305 655-4633

833 -1116 (Boat)

SAPHIR, DR. OTTO, Michael Reese Hospital, 29th St. & Ellis Ave, Chicago, Ill. PATHOLOGY. Vienna, Austria, Aug. 29, 98, nat; m. 23; c. 2. M.D. Vienna, 21. Intern, Allgemeines Krankenhaus, Vienna, 21-22, asst. path. 22-23; Hanna fellow, sch. med, Western Reserve, 23-24, from instr. to asst. prof. PATH. 24-29, from asst. prof. to assoc. prof. COL. MED. ILLINOIS, 29-42, CLIN. PROF. 42-Res, Cleveland City Hosp. 25-27, pathologist, 27-29; Michael Reese Hosp. 29- Civilian with U.S.A.; U. S. Pub. Health Service. Soc. Exp. Path; Soc. Path. & Bact; Col. Path; Soc. Cancer Research; Soc. Clin. Path; Am. Med. Assn; Ill. Soc. Path. (pres, 45); Chicago Path. Soc. (pres, 41). Various phases of pathology including the pathology of the heart, tumors and cancer.

SAPIRSTEIN, DR. LEO A(BRAHAM), National Cancer Institute, Bethesda, Md. PHYSIOLOGY. New York, N. Y., Oct. 6, 19; m. 46. B.S. Col. City of N. Y. 37; M.A. California, 40, Ph.D. (physiol), 43. M.D. 46. Chemist, west. regional research lab, bur. agr. & Indust. chem, U. S. Dept. Agr. 40-42; instr. physiol. med. sch. California, 43-44; intern, U. S. Marine Hosp. 40-47; SR. ASST. SURGEON, NAT. CANCER INST, U. S. PUB. HEALTH SERVICE, 47- Guest lecturer George Washington, 48- U.S.A. 42-45. Physiology of experimental hypertension; mechanism of folic acid actions.

SAPLIS, RAYMOND A(LFRED), U. S. Geological Survey, Washington 25, D. C. GEOLOGY. Belvedere, Calif. Aug. 4, 22. B.S. Calif. Inst. Tech. 44. Jr. geologist, Tamarack & Custer Cons. Mining Co, Idaho, 44; GEOLOGIST, MIL. GEOL. BRANCH, U. S. GEOL. SURV. 46- Inf. 44-46. A.A.

SAPP, DR. ROBERT W(ALL), E. I. du Pont de Nemours & Co, Parlin, N. J. ORGANIC CHEMISTRY. Albany, Ga, Oct. 30, 13; m. 37; c. 2. A.B. Duke, 34; A.M. Illinois, 35; Harvard, 38-39; Ph.D. (chem), Stanford, 40. Anal. chemist, Dow Chem. Co, 36-37, research chemist, 37-38; Hercules Powder Co, 40-47; SR. RESEARCH CHEMIST, PHOTO PRODUCTS RESEARCH LAB, E. I. DU PONT DE NEMOURS & CO, 47- Chem. Soc. Plasticizers; insecticides; alkaloids; resins from terpenes and rosin; synthesis of color developers.

SAPPENFIELD, DR. BERT R(EESE), Montana State University, Missoula, Mont. PSYCHOLOGY. Ind. Jan. 2, 12; m. 37; c. 1. B.A. DePauw, 35; M.A. N. Y. Univ. 38, Ph.D. (psychol), 41. Asst. psychol. N. Y. Univ. 35-39, 40-41, psychol. examiner, 36-39; sec'y com. tests, Life Office Management Assn, 39-40; instr. PSYCHOL, MONTANA, 41-44, 46, asst. prof. 46-48, ASSOC. PROF. 48- A.F. U.S.A. 44-45. Assoc. Psychol. Assn. Attitudes; academic prediction; group Rorschach; block design test.

SAPPINGTON, DR. C(LARENCE) O(LDS), 330 S. Wells St, Chicago 6, Ill. INDUSTRIAL HYGIENE. Kansas City, Mo, Sept. 29, 89; m. 20; c. 1. A.B. Whitman Col. 11; M.D. Stanford, 18; fellow, Harvard, 22-24, Dr. P.H. 24. Asst. res. physician, San Quentin Prison, and chief surgeon, Pacific Coast Shipbuilding Co, Calif. 19; teaching fellow Indust. hygiene, sch. pub. health, Harvard, 22-24; med. director, Montgomery Ward & Co, Calif. 24-28; director Indust. health div, Nat. Safety Council, 28-32; CONSULTANT, INDUST. HYGIENE AND OCCUPATIONAL DISEASES, 32- Asst. surgeon, U. S. Pub. Health Service, 20-; lecturer, Stanford and California, 24-28. Special ed. Indust. med., 'Calif. & West. Med'; consultant and ed. in chief, 'Indust. Med', 32- Wm. S. Knudsen award, 38. Mem. Indust. Hygiene Foundation, Del. Int. Hygiene Cong. Dresden, 30. Fel. Am. Med. Assn; fel. Pub. Health Assn; fel. Assn. Indust. Physicians & Surg; Indust. Hygiene Assn; Chem. Soc; fel. Acad. Occupational Med; fel. Cent. States Soc. Indust. Med. & Surg. (pres, 42-43); Calif. Med. Assn; Ill. Med. Soc; Ill. Acad. Industrial hygiene in factories and mines; measurement of air contaminants, dust, gases, vapors, fumes, illumination, ventilation and irritating skin chemicals; medicolegal phases of occupational diseases; essentials of industrial health.

SAPPINGTON, DR. SAMUEL WATKINS, Box 528, Bryn Mawr, Pa. PATHOLOGY. Philadelphia, Pa, Jan. 3, 74; m. 17. M.D. Hahnemann Med. Col. 97, hon. Sc.D. 41. Demonstrator, HAHNEMANN MED. COL. 00-05, assoc. prof. PATH. AND BACTER. 05-07, prof. 07-47. EMER. PROF. 47- Fel. Am. Med. Assn; fel. Col. Physicians; fel. Col. Path; Soc. Immunol; Soc. Bact. Arteriosclerosis; hematology.

SARASON, DR. SEYMOUR B(ERNARD), Yale University, New Haven, Conn. PSYCHOLOGY. Brooklyn, N. Y., Jan. 12, 19; m. 43. B.A. Newark, 39; M.A. Clark, 40, Ph.D. (psychol), 42. Exten. psychol. Worcester State Hosp, Mass, 41-42; chief psychologist, Southbury Training Sch, Conn, 42-46; RESEARCH ASST. AND ASST. PROF. YALE AND INST. HUMAN RELATIONS, 48- Summers, visiting lecturer, California, 47; Pa. State Col. 48, Fel. Psychol. Assn; Conn. Psychol. Soc. Personality and perception; diagnostic patterns; psychological tests.

SARBACHER, PROF. ROBERT (IRVING), Wedd Laboratories, Inc, 2010 Massachusetts Ave, N.W. Washington 8, D. C. ELECTRONICS, COMMUNICATION ENGINEERING. Baltimore, Md, Sept. 6, 07. Sc.B. Florida, 33; Princeton, 33-34; Sc.M. Harvard, 35, Sc.D. 39. Elec. engineer, elec. Research Products, Inc, New York, 20-31; instr. physics and communication eng. Harvard, 38-40; prof. elec. eng. Ill. Inst. Tech. 40-42; director research and develop, aircraft, radio and radar div, Navy Dept. 42-45; dean grad. sch. chairman grad. council and mem. admin. council and exec. cmn. Ca. Tech. 45-48; CONSULTING SCIENTIST AND DIRECTOR, WEDD LABS, INC. 48- Director, Robert I. Sarbacher & Associates, Ga. and Wash. D. C. 36-; instr. Radcliffe Col. 37-39; prof. Harvard,

41; institutional rep, Oak Ridge Inst. Nuclear Studies, 46-48. Trustee, research foundation, Ga. Tech. 46-48. Mem. advisory council, War Assets Admin. 47. A.A.; Physical Soc; Inst. Elec. Eng; Math. Soc; Inst. Radio Eng; Soc. Eng. Ed; Soc. Mil. Eng. Electron tubes of high power; electron tube oscillators with emphasis on microwave generation; ultra-high frequency technics; hyper and ultra-high frequency engineering.

SARBER, R(AYMOND) W(ILLIAM), Parke, Davis & Co, Detroit 32, Mich. MEDICAL BACTERIOLOGY. Hammond, Ind, April 15, 16; m. 37; c. 1. A.B. West. Mich. Col. 38; Michigan, 39-40; M.S. Cincinnati, 41. Asst. bacter. Michigan, 40; asst. prof. col. pharmacy, Cincinnati, 40-42; consultant, Clopay Corp. 41-43; RESEARCH BACTERIOLOGIST, PARKE, DAVIS & CO, 42- Soc. Bact; Mich. Acad; Detroit Physiol. Soc. Tuberculosis; antigens and tuberculin; pertussis antigens; germicide testing methods; biological and chemical tuberculosis antigens.

SARCHET, BERNARD REGINALD, Koppers Co, Inc, Box 37, Oil City, Pa. CHEMICAL ENGINEERING. Byessville, Ohio, June 13, 17; m. 41; c. 2. B.Ch.E. Ohio State, 39; M.Ch.E. Delaware, 41. Grad. asst. Delaware, 39-41; operator, eng. & construction div, KOPPERS CO, INC, Pittsburgh, 41-42, gen. foreman, butadiene div. 42-45, supervising chem. engineer, research div. 45-46, eng. & construction div. 46-47, MANAGER, OIL CITY PLANT, 47- Chem. Soc; Inst. Chem. Eng. Absorption and distillation.

SARD, PROF. ARTHUR, 146-10 Beech Ave, Flushing, N. Y. MATHEMATICS. New York, N. Y. July 28, 09; m. 33. B.S. Harvard, 31, M.A. 32, Ph.D. (math), 36; Am. Field Service fellow, Sorbonne, 32-33. Instr. and tutor math, Harvard, 33-36; mem. actuarial dept, Prudential Ins. Co, N. J. 36-37; instr. MATH, QUEENS (N. Y.) 37-41, asst. prof. 41-48, ASSOC. PROF. 48- Office Naval Research contract, 47-49. Mem. research staff, applied math. group, div. war research, Columbia, 43-45, director, 45. Math. Soc; Physical Soc; Math. Assn; Inst. Math. Statist. Theory of approximation; critical values.

SARD, DR. R(OBERT) D(ANIEL), Washington University, St. Louis 5, Mo. PHYSICS. New York, N. Y. Aug. 23, 15; m. 42; c. 2. B.S. Harvard, 35, Sheldon Prize fellow, 35-36, Bayard Cutting fellow, 39-40, M.A. 40, Ph.D. (physics), 42. Research asst. Kamerlingh Onnes Lab, Leiden, Netherlands, 38-38; instr. physics, Harvard, 38-42, research assoc. radio research lab, 42-45; Mass. Inst. Tech. 45-46; asst. prof. PHYSICS, WASHINGTON (ST. LOUIS), 46-48, ASSOC. PROF. 48- Civilian with U.S.N.; Office Sci. Research & Develop. Physical Soc. Cosmic rays; low temperature physics; noise theory; radar jamming theory.

SARDESON, DR. F(REDERICK) W(ILLIAM), 3942 Marine View Drive, Seattle 66, Wash. GEOLOGY. Oregan Mills, Wis, Feb. 22, 66. B.L. Minnesota, 91, M.S. 92, Ph.D. Freiburg, 95. Instr. pulcrit, Minnesota, 92-94, 99-05, asst. prof. 05-14; expert geologist, State Securities Comn, Minn. 17-34; CONSULTING GEOLOGIST, U. S. Geol. Surv. 89, 91, geologist, 11-24. Int. Geol. Cong. Zurich, 94. A.A.; Geol. Soc. Geology; paleontologic evidence and the theory of evolution.

SARETT, DR. HERBERT P(AUL), Tulane University School of Medicine, New Orleans 13, La. BIOCHEMISTRY. Brooklyn, N. Y., Feb. 5, 16. B.A. Brooklyn Col. 36; M.S. Cornell, 37; Ph.D. (biochem), Duke, 42. Instr. BIOCHEM, sch. med, Duke, 42-43; research assoc. and asst. prof. Oregon State Col. 43-45; research assoc. med. div. Chem. Warfare Service, Md. 45; ASST. PROF. SCH. MED. TULANE, 46- Civilian with Office Sci. Research & Develop. A.A.; Chem. Soc; Soc. Biol. Chem; Inst. Nutrition; Soc. Exp. Biol; New Orleans Acad. Metabolism of nicotinic acid; chemical and microbiological assays for B vitamins; bacterial growth requirements; relation of protein and B vitamin metabolism; bacterial utilization of vitamins and effects of inhibitors.

SARGEANT, MELVIN J(OHN), Naval Ordnance Test Station, BOQ 21 C, China Lake, Calif. ELECTRICAL ENGINEERING. Northfield, Minn, June 13, 18. B.A. St. Olaf Col. 42. Physicist, U. S. Navy, La. 42-44; Ala. 44-45; experimental physicist, exterior ballistics, NAVAL ORDNANCE TEST STA. 46-48; HEAD BALLISTICS & LIGHTING UNIT, AVIATION ORDNANCE DIV. 48- Physical Soc. Permanent and induced magnetism of all types of ships; exterior ballistics of spinning projectiles; exterior ballistics of fired rockets fired from aircraft; mechanics and aerodynamics involved in aircraft angle of attack studies.

SARGENT, DR. D(ONALD) E(OWARD), Hillside Ave, Easton, Pa. ORGANIC CHEMISTRY. Alton, Ill, June 16, 18; m. 42; c. 2. B.A. Iowa, 38; Ph.D. (org. chem), Yale, 41. RESEARCH CHEMIST, Easton, E. I. du Pont de Nemours & Co, Wilmington, 41-42; CENT. RESEARCH LAB, GEN. ANILINE & FILM CORP, PA. 43- Chem. Soc. Polymerization; high pressure reactions; photochemistry; color photography; organic synthesis; dyestuffs.

SARGENT, PROF. ELMER LAWRENCE, Long Island University, Brooklyn 1, N. Y. CHEMISTRY. Keokuk, Iowa, Dec. 16, 90; m. 27; c. 7. B.S. Colo. Col. 17; M.S. Rutgers, 22; M.A. Columbia, 25. Instr. West. Colo. State Col. 17-18; CHEM. Rutgers, 21-27; asst. prof. LONG ISLAND, 27-29, assoc. prof. 29-44, PROF. AND HEAD DEPT. 44- Organic medicinal; analytical and organic chemistry.

SARGENT, PROF. FLORENCE (ELIA) (MRS. SYDNEY P. SARGENT), Simmons College, Boston, Mass. ORGANIC CHEMISTRY & BIOCHEMISTRY.

*Same listing in '55 ed.*





When Dr. Robert Sarbacher was in the second grade, the teacher asked his mother to take him out of school for a year, because the other children simply couldn't keep up with him.

# Look Out— Here Comes a Genius!

By *SIDNEY SHALETT*

Introducing the man of the future—Dr. Robert Sarbacher, who earned \$35,000 a year before he was old enough to vote, and now invents devices more fantastic than Jules Verne's.

**O**NE evening recently at the Army and Navy Country Club outside of Washington, D. C., a young man on the dance floor drew the attention of a three-star general who was seeking release from the onerous worries that beset the high brass. Sharply dressed in a light-colored suit and hand-painted tie of unashful hues, the young man was executing an expert rumba with a congressman's wife. His face, smooth and untroubled, reflected not a single care. A little envious, the general asked if anyone knew the gay young man. A junior officer identified the dancer as Dr. Robert I. Sarbacher, an eminent electronic scientist and nuclear physicist, whose laboratory was handling an intricate research contract for the general's own branch of the Army. "Him a scientist!" exclaimed the general. "Never!"

Later in the evening the general and Doctor Sarbacher were introduced. The general, in his best three-star manner, began shooting questions designed to expose what he thought was an Einsteinian impostor. Sarbacher, who, as a matter of fact, studied under Einstein, soon had the general submerged in a discussion of thermionic vacuum tubes, electron optics, harmonic voltage and the like. Though he refrained from identifying himself as the author, he also was able to buttress his theories by statements of principle extracted from the Sarbacher-Edson textbook, *Hyper and Ultra-High Frequency Engineering*, which is a classic for graduate students in electrical engineering and physics.

There was nothing unusual about the general's experience. Robert Irving Sarbacher, Sc.B., Sc.M. and Sc.D., now forty-two years old and founder, president and director of research of the National Scientific Laboratories of Washington, D. C., has been astounding people for a long time. The first known instance occurred when he was in the second grade. His teacher called on his mother to ask her if she would take Robert out of school for a year. His mother asked what he'd been doing wrong. "It isn't anything wrong," the teacher said. "It's just that I'm afraid he's a genius. The other children can't keep up with him."

Despite the teacher's plea, Mrs. Sarbacher kept her son in school. The teacher became so interested in Robert that she arranged a transfer for herself, so she could follow him into the third grade.

At the age of ten, Sarbacher was astounding the neighborhood children by experiments performed with a chemistry set his father had bought him for Christmas. At twelve, he was making radio sets, had built his own transmitter and was a licensed "ham" operator. At eighteen, he was graduated from Baltimore Polytechnic Institute, and before he was twenty-one he was earning \$35,000 a year.

At twenty-four, Sarbacher decided to go back to school. In the course of the

(Continued on Page 195)





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When Sarbacher was seventeen, his father ran into financial reverses, and Robert graduated from Baltimore Polytechnic on a slim budget. After a desultory stab at a college business course, which he found boring because economics seemed to him such an inexact science, he decided to strike out on his own. He set off for New York City with a capital of twenty-three dollars. His family did not approve of his going to the big city, so, next to the primary business of keeping from starving, Robert's main concern was to prevent news of his desperate straits from filtering back to Baltimore.

His first act after arriving in New York was to buy a newspaper and consult "the rooms-for-rent" and "help-wanted" columns. He found a seven-dollar-a-week room near 72nd and Broadway, then started making the rounds of the employment agencies. No one wanted him. He was down to fifty cents when he finally got a job as a draftsman for a public utility. His salary was forty-five dollars a week, payable every two weeks, but, for some bookkeeping reason, the initial wages were withheld, so that it was four weeks before Sarbacher received his first ninety dollars. "That," he says, "was when I acquired a hock-shop set of values. I lived by pawning my belongings and I learned the value of good and durable clothing."

To save carfare, he would walk from 72nd Street to his office, which was at 41st and First Avenue. The last thing he had left to hock was his leather suitcase. That brought seventy-five cents and got him through to his first payday.

As his financial status improved, Sarbacher reclaimed his possessions and built up a bank account. In his zeal to do a good job and also to keep from doing things that cost money, he worked overtime at the office until the night watchman would get impatient and insist that he leave. This was the beginning of a lesson that hard work pays off. Sarbacher's salary rose to seventy-five dollars a week within six months.

However, he decided to give up the seventy-five-dollar-a-week job for a sixty-dollar one with Electrical Research Products, Inc., then a Western Electric affiliate, because he felt it would advance his prospects of graduating from draftsman to engineer. In about six more months, ERPI did make him an engineer. Sarbacher helped produce a new motion-picture projector and accessories, and then was assigned the task of designing trunks in which to package them.

In due course, the purchasing agent obtained a number of outside bids for manufacturing the Sarbacher trunks. Sarbacher felt that they all were outrageously high. "They offended my sense of hock-shop values," he says. The purchasing agent told Sarbacher he could have the contract if he could build them for less.

"I went over to Third Avenue where there were a number of small trunkmakers, and lined them all up," Sarbacher relates. "I told them if they'd co-operate with me we could make ourselves a lot of money. In ten days we had produced better trunks which we could sell at less than half the amount of the lowest bid obtained by the purchasing agent. ERPI was happy, the Third Avenue manufacturer made a nice profit, and by merely giving an hour or two to the project after working hours, I was able to clear nearly thirty-five thousand dollars a year for myself."

With his new prosperity, Sarbacher, now twenty-one, began living better. Some old school friends whose fathers were well-to-do looked him up. They were fascinated with him because, like themselves, he had a job in a company not owned by his father. Soon Sarbacher, with the mildew and cooking odors of his seven-dollar-a-week furnished room hardly out of his clothes, found himself living in a fancy hotel and turning around in the evenings on Park Avenue. All that he recalls vividly from this period are the twelve-cylinder, yellow convertible roadster he acquired, and the fact that at a bridge game he lent Babe Hutton, the Woolworth heiress, thirteen dollars to pay off her losses. He doesn't remember whether he ever got it back.

Sarbacher had no intention of pursuing this butterfly existence for long. The easy money of the trunk business interested him only as a means of grubstaking himself to an engineering education. He knew that science was going to be his chosen field and he realized he would get nowhere in it without higher training. Schools with fancy names meant nothing to him; his method was to survey the field of teaching talent and decide under whom he wanted to study. His first choice was the University of Florida, where two men whose work he admired, Dr. Blake Van Leer and Prof. Joseph Weil, were, respectively, dean of engineering and head of the electrical-engineering department. A more mundane factor in Florida's favor was that Sarbacher's oldest brother was living in the state and Robert could establish legal residence with him, thus saving on tuition.

Only one thing went wrong with Sarbacher's plans. Another brother had come to live with him in New York City and had persuaded him to invest all his savings in a real-estate venture. This was just at the time of the 1929-30 crash. When Sarbacher picked up the pieces, he found that after selling most of his furniture and changing the twelve-cylinder convertible for a secondhand small car, he could pay for his first semester's tuition and have fifty dollars to spare.

At the University of Florida, Sarbacher soon became a legend, both as a scholar and as a personality. A certain number of credits were allowed him for the work he had done at Baltimore Polytechnic Institute. By taking summer courses and carrying a staggering load, he was able to graduate in two years with 144 credits.

He solved his money problem by renting his secondhand car to his Kappa Sigma Fraternity brothers. He was a good mechanic and could keep it in perfect running order despite the abuses it took under such a rental system. "As a matter of fact," Sarbacher recalls, "nothing much happened to the car except that one night a wheel was stolen while a fraternity brother had it on a week-end date in Jacksonville. He sort of borrowed a wheel from another car he found parked on a dark street, but it was a larger car and the wheel didn't fit very well. However, I let him take the car back to Jacksonville the following week end and he came home with the right-sized wheel."

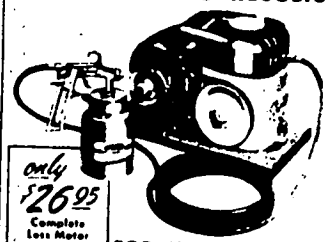
Next on Sarbacher's educational program—though again with the idea of the amount of the lowest bid obtained by the purchasing agent. ERPI was happy, the Third Avenue manufacturer made a nice profit, and by merely giving an hour or two to the project after working hours, I was able to clear nearly thirty-five thousand dollars a year for myself."

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walk with Einstein from the latter's home to Fine Hall, where classes were conducted. "It was a real privilege to be able to learn from him," Sarbacher says. "When I left Princeton, mathematical physics never again was a problem to me."

By the time he entered Harvard in 1935 for graduate work in physics and communication engineering, Sarbacher was married. As a married student, he was permitted to rent quarters in a Harvard development known as Holden Green. "Old President Lowell had felt that married students should begin learning some of the responsibilities of life," Sarbacher explains, "so he had equipped each apartment with its own furnace and coalbin. From an engineering standpoint, the furnaces had atrocious drafts, and the fire was always going out during the night." The real trouble with the furnace, according to a classmate of this period, was that Sarbacher used to study until three o'clock in the morning and forget to stoke it.

Sarbacher's record at Harvard was remarkable—three A's and one B the first year, and all A's thereafter. He stayed on at Harvard until 1940, earning both his master's and doctor's degrees in science and serving as an instructor and as an assistant in research to the renowned Doctor Chaffee.

Sarbacher's natural talent for making large sums of money while pursuing his scientific interests began to assert itself at Harvard. As Chaffee's assistant, his services as a consultant were greatly in demand, and his fee was \$100 a day. The first time he was paid for eighteen days of research, he gravely announced to his associates that a pure scientist just mustn't become accustomed to having so much money around, so he blew in the \$1800 as down payment on a convertible roadster even more glittering than the one he had abandoned in New York. A \$2000 fee came along soon after, and that went into a mink coat for his wife. Then he began saving his money.

Sarbacher went from Harvard to the Illinois Institute of Technology, in Chicago, where he taught electronics. Harvard borrowed him during the summer of 1941 to help build up a war-training course for Army Signal Corps officers. Doctor Chaffee tried to persuade him to remain at Harvard, but Sarbacher returned to Illinois in November. While at Harvard as a student and instructor, Sarbacher had studied with or taught many of the

small and highly select group of men who later became the brains of the Navy's electronic department. When the United States was drawn into the war, these officers, then on their way to becoming captains, lured him from Illinois Tech and installed him at the Navy Department in Washington as a consultant on radar, loran—long-range electronic navigation—blind-landing systems and other electronic devices. His friends persuaded him to remain a civilian consultant, instead of going into uniform, so he could talk back when necessary to the rare but at that time still-surviving type of admiral who was not convinced that radar could ever replace the signal flag. This turned out to be a good idea, as there were a few times when he had to step on some important toes, which he couldn't have done as a subordinate officer.

Toward the end of the war, Sarbacher was given a thirty-day leave of absence to help a manufacturing company out of a hole. The firm had a contract, involving approximately \$10,000,000, to manufacture a desperately needed piece of equipment known as a "spot-jammer" for the Air Force. The Germans had developed a high-altitude fighter that was hovering over our bombers, well above gun range, and broadcasting flight information to the Wehrmacht anti-aircraft batteries. The spot-jammer was needed to obliterate its signals. About a year after the contract was let, according to Sarbacher, the manufacturer still had not developed even a model for the instrument.

Sarbacher knew how urgent the problem was; he had been told the secret figures on Air Force's losses due to lack of this piece of equipment. He was determined to produce the model in less than thirty days and, toward that end, he attacked the problem by means of what might be called a saturation method. This is a system he still employs when a deadline is pressing or inspiration is flowing. It means sitting down and working until sheer exhaustion stops him, then resting a few hours and resuming the search for the answer. This instance was Sarbacher's all-time high for concentrated work.

An associate who watched him at it tells the story: "He sat in a workroom with paper, pencils, slide rule, a cold-iron and other tools. Sometimes he had other engineers with him, but often he was alone except for one man, an engineer named Uriah L. Allen, who stayed with him right through it. Bob

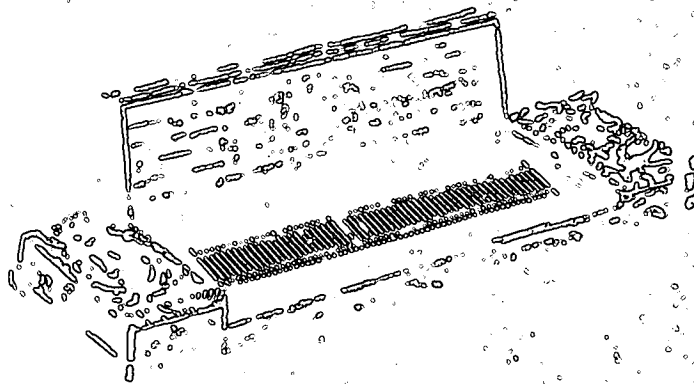
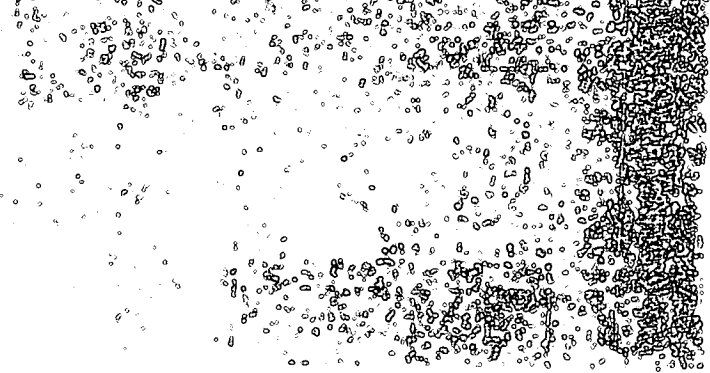
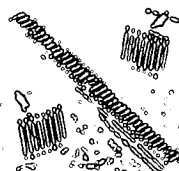


Diagram of the spot-jammer developed by Sarbacher



worked for ten days, and in that ten days he had only about twenty hours' sleep.

"At the end of ten days he had produced a model that worked. He had conceived it, designed it and largely built it with his own hands. He had done what the other engineers had not been able to do in a year."

Sarbacher went back to the Navy, making a mental note, which he has carried out, that when he started his own laboratory, Urey Allen was going to be the first man he hired. But in a week or so the spot-jammer manufacturer was calling again. He had the model, but now he was in production difficulties. Would the Navy let him have Sarbacher back to supervise production? Sarbacher went back to the company and remained for seven months.

His postwar acceptance of the deanship of Georgia Tech's graduate school was, as he puts it, "a rounding out of my academic experience." Among his corollary duties, he represented the school on the governing board of the Institute of Nuclear Studies at Oak Ridge, Tennessee. President Van Leer says that the Georgia Tech graduate school still is benefiting from ideas imparted by Sarbacher during his three years there.

But Sarbacher was eager by this time to get on with his long-nurtured plan to set up his own laboratories, and he was impatient with the administrative duties, the conferences and the ten-party aspects of his graduate-school job. Offers of fat consulting contracts began coming his way, and it was frustrating to Sarbacher when he found time to accept only a few of them. The contracts he did accept involved complex electronic problems that genuinely interested him. When a request for scientific help on some purely gadgeteering problem came in, Sarbacher would either dismiss it or would give a curbstone opinion without charging a fee.

For instance, at a party one evening he met an official of a large soft-drink corporation. The official remarked that his laboratory men had been trying unsuccessfully for a year to develop a practical method of bottling a straw along with the beverage, so that, when the bottle cap was lifted, the straw would pop up, ready for the consumer's lips. Would Sarbacher like to take on the contract? Instead, Sarbacher gave a minute's thought to the problem and suggested that the laboratory men try tipping the straw with a certain tasteless, harmless, magnetic plastic element, which he named. When an electromagnet is used underneath the bottle during the capping process, the combination does the trick. The company hasn't marketed the pop-up straw yet, but the official was delighted with the free information. Sarbacher's philosophy, which he insists has paid off many times, is that if he is generous with easy ideas and does not try to squeeze every dollar out of a situation, companies will remember him when they have truly difficult research problems.

Sarbacher's decision to establish his laboratories in Washington was based on three factors: first, the nearness to the National Bureau of Standards, which offers unequalled facilities for testing the accuracy of the delicately balanced instruments that are used in electronic research; second, the availability of the incomparable scientific files of the Library of Congress for research purposes, and, third, the handiness to headquarters of the Army,

Navy and Air Force, which are his biggest customers.

Sarbacher's organization is one of the few privately controlled organizations in the country equipped to carry out electronic research on the scale it undertakes. The corporation is capitalized at \$250,000 and Sarbacher holds more than 80 per cent of the common stock.

As a home for National Scientific Laboratories, Sarbacher leased a spacious old brownstone-and-brick mansion on Massachusetts Avenue, not far from the beginning of Embassy Row. Laboratories, drafting rooms, chemistry and glass-blowing sanctums, and metal- and wood-working shops have been set up in former bedrooms, sitting rooms and pantries. Most spectacular is a chamber with an inner room, constructed at a cost of \$15,000 and consisting of two layers of copper and two

chinese. According to Sarbacher, the machine will take bills of all descriptions, count them by denominations, divide them by Federal Reserve Districts and perform all the other sorting operations which banks require. For good measure, it will determine electronically what bills are so worn that they should be retired, and will set them aside after counting them. It even will detect certain types of counterfeit bills. This is one device that Sarbacher and his associates will release only under a royalties arrangement.

Most of the military projects carry security classification and cannot be discussed. These projects often involve the design and construction of instruments which have important civilian applications. One device may be described as a superaccurate, pocket-sized radar whose beams have extraordinary properties when they encounter moun-

the fact that there were at least fifty feasible avenues by which the solution might be reached. With time breathing down their necks, Sarbacher and his engineers boldly and arbitrarily eliminated all but two or three of the approaches, thus taking a short cut to the solution.

Even so, extensive tests were needed to determine which approach was best. Since testing it would interfere with the city's normal television channels, the experiments had to be conducted on a lonely highway outside Washington at two o'clock in the morning. Sarbacher often wonders what would have happened if a group of suspicious policemen or deputy sheriffs had come across his men working on the highway with a mysterious black box. Now, to provide a place where such experiments may be conducted in privacy, he has set up a subsidiary laboratory at a small airfield near Washington.

Sarbacher's greatest impatience today is directed at the school of thought, which holds that, in view of the destructive potential of atomic energy, science has gone too far.

"Rubbish!" he says. "They could have said the same thing when man discovered fire. In the beginning, fire, too, was a great menace and a great destroyer before we learned how to harness and control it. The splitting of the atom eventually will produce great good for man."

He thinks a great deal about the world of mass and energy in which we live. This, he says, is "a world in which invisible particles of electric energy, constantly streaking through space at speeds of over a hundred thousand miles per second, are creating, within their atomic orbits, everything we touch and see, including man." He speculates on the further unmasking of the hidden secrets of nature and on the harnessing of the atomic nucleus.

"This is the field to which I would like to make some contribution," Sarbacher says. "Gadgeteering is all right in its way. We could make you a house that would be heated by radar beams—though you'd have to substitute plastics for all metals, including the fillings in your teeth, as the metal would get awfully hot. We could fix up windows that would open and shut for you when you addressed them by name. We could make you a bed with an electronic mattress that would both keep you warm and massage you as you slept."

"But I'm not particularly interested in these things. The back-carcasing mattress, the straw that pops up when you open the soft-drink bottle, hold little fascination for me. I happen to think that we are on the threshold of a whole new world in which we shall gain a revolutionary concept about the structure of matter and a means of applying this concept. I think that scientific research is the answer to every material problem now facing us. I think that the new knowledge we are certain to gain is capable of curing our economic ills. It is capable of producing our food for us by synthesis, thus conquering famine; it will eliminate, in time, the diseases before which mankind now seems so helpless."

"So, when anyone complains that science has gone too far and that, if we're not careful, we'll all push-button ourselves out of jobs, I repeat, rubbish. Neither the United States nor any other progressive country is going to remain a nation of candlemakers or buggy-whip manufacturers. There is no limit to the expanding frontiers of science."

THE END



"... I say to her and she says to me  
and I say to her and she says to..."

THE SATURDAY EVENING POST

of steel. It is a "screen room" in which hypersensitive electronic instruments can be tested without interference from any stray rays.

Sarbacher, now divorced, gave up his own apartment so he could live in the laboratory while it was being organized. When a project is under way he will work until three or four o'clock in the morning, and then fall into bed in his third-floor room. His staff has a tacit conspiracy to let him sleep late. However, he is usually up early, breakfasting on milk and packaged cereals, which he keeps in a refrigerator along with certain perishable chemicals, and is ready for the morning's work.

Sarbacher's laboratories took on a considerable number of contracts immediately after organizing. Deadlines on some of the projects were so pressing that there was not time enough to paint and plaster the walls in several of the workrooms. Projects now are being carried out for the armed services, the Civil Aeronautics Administration and private industrial concerns.

In the last-named field, the laboratory is undertaking the development of a weird electronic currency-sorting ma-

chine, clouds or fog. It employs principles that Sarbacher says will be useful to color television.

One of the imagination-staggering problems the laboratory had to solve in developing a special instrument was the question of "making time stand almost still." Sarbacher and his engineers are seeking to perform a certain operation—and measure it—in a time interval of ten-billionths of a second. At this rate, the electromagnetic waves with which they are working, traveling at the speed of light, move only approximately ten feet. "I think it safe to say," Sarbacher declares, "that we already have worked with time intervals in which very few, if any, practical experiments previously had been conducted. We now are trying to move up to the one-ten-billionth-of-a-second interval."

When Sarbacher took on a certain Army contract, the specifications seemed feasible, though another company had been stalled for a year on the project. Then further changes in requirements made the problem more difficult. There was a necessity for completing it in an extremely short period of time, despite



## INTERNATIONAL AUTHORITY

ROBERT I. SARBACHER held his first important position as assistant to the renowned Dr. Chaffee, Head of Harvard's Engineering and Applied Physics Department. Prior to his academic work at Harvard, Dr. Sarbacher's educational training was secured at Princeton and at the Institute for Advanced Study at Princeton where he studied under Dr. Einstein.

He taught at Harvard, the Illinois Institute of Technology, and Radcliffe, and became Dean of the Graduate School of the Georgia Institute of Technology, where he also served as Chairman of the Graduate Council.

In the industrial world he served as Director of Research for the National Scientific Laboratories, Washington, D. C.; Prosperity Co., Inc., Syracuse, N. Y.; Allies Products Corporation, Miami, Florida; Bowser, Inc., Chicago; Gude-man Co., Chicago; Jos. Weidenhoff, Inc., Al-gona, Iowa; Electrofile Corp., New York; Briggs-Filtration Co., Washington, D. C.; also as Vice-President of Maguire Industries, Inc., New York, and President, Allies Products Corpora-tion.

He was Institutional Representative at the Oak Ridge Institute for Nuclear Studies, and Member of the Advisory Council, War Assets Administration.

He also serves as Professional Lecturer, George Washington University, and as a mem-ber of the Nuclear Energy Committee of the National Manufacturers Association.

He has written many books and scientific articles. His consulting firm, Robert I. Sar-bacher & Associates, is located in Washington, D. C., for ready access to the National Bureau of Standards, the exhaustive files of the Library of Congress, and the Headquarters of the Armed Forces.

Dr. Sarbacher's **ENCYCLOPEDIA OF ELECTRONICS AND NUCLEAR ENGINEERING**, into which he has poured more than \$90,000 of his own funds (aside from his own time) for research and manuscript preparation; constitutes a crown-ing achievement and fundamental contribution to the scientific world.

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