

The UFO Files Palmiro Campagna.

- correspondence with Outway
- final minutes of Second Storey exist

search
search

Jones Defense Dec 12, 1992.

combined cycle engine / waived programs SAP

FOIA Silvia Bag P. 14

search Lady Bug

Xerox notes

question P. 144. MKULTRA June 1, 1951 meeting at Ritz-Carlton
in Montreal

file FOIA on Wilbur B. Smith FBI

SECRET

INCIDENTS - FLYING SAUCERS.

1. DST advised Secretary JIC on 6th April 1950 that the Minister had requested JIC to seek the co-operation of the Services in reporting on the occurrences or alleged occurrences of Flying Saucers passing over Canada. He requested that this be discussed at the next meeting of the JIC.

2. This was discussed at the 220th meeting of the JIC which took place on 12th April 1950. Items 19, 20 and 21 of the Minutes are as follows:-

19. Mr. Langley reported that the Minister of National Defence had requested that the Chairman of the Defence Research Board seek the co-operation of the Services in reporting on the occurrences or alleged occurrences of flying saucers passing over Canada.

A number of cases had been reported in various parts of Canada and it was suggested that the field intelligence officers of the three Services and the Royal Canadian Mounted Police might be instructed to investigate those incidents and report thereon to the Department of National Defence. Such reports could be dealt with ultimately either by the Directorate of Air Intelligence or the Directorate of Scientific Intelligence.

20. Colonel Todd suggested that the Director of Air Intelligence and the Director of Scientific Intelligence might be asked to collaborate in the preparation of a suitable questionnaire which could be circulated to the intelligence officers and the Royal Canadian Mounted Police in the field to assist them in their investigations.

21. The Committee, after further discussion, agreed that:

- (a) the Director of Air Intelligence and the Director of Scientific Intelligence collaborate in the preparation of a questionnaire suitable for investigating and reporting upon the occurrences or alleged occurrences of flying saucers passing over Canada;
- (b) these questionnaires be distributed to field intelligence officers of the three services and to the Royal Canadian Mounted Police to assist them in their investigations;
- (c) the Director of Air Intelligence co-ordinate the investigation arrangements in the field as between the three Services and the Royal Canadian Mounted Police; and
- (d) all the field reports on flying saucers be passed to the Director of Scientific Intelligence for final examination on behalf of the Department of National Defence.

Four

Yes We Do, No We Don't

"... in so far as the press and public were concerned at least, [the saucer studies] had been discontinued. Very recently, however, this investigation was re-opened, but is now classified."

Department of National Defence memorandum

Solandt insisted he never knew anything about crashed saucers, Vannevar Bush's involvement, or any of the other aspects of the mystery of the saucers revealed by Sarbacher. As it was, the report issued by Project Saucer (Grudge) had publicly denounced the subject. Yet Canada's Minister of National Defence took it all to heart.

In the papers of the Honourable Brooke Claxton, the Canadian Defence Minister in 1950, it is noted that he and Solandt met

with Bush in 1948. It seems that Claxton was a particular fan of Bush's, having read some of his works. What transpired in the ensuing years is quite interesting.

In April 1950, well before Smith's meeting with Sarbacher, Claxton requested that Solandt obtain the co-operation of the three Canadian military services — army, navy, and air force — in reporting occurrences of flying saucers seen over Canada. Claxton suggested that the matter be discussed at a meeting of the Joint Intelligence Committee (JIC). This committee included representation from the Director of Air Intelligence (DAI), the Director of Naval Intelligence (DNI), the Director of Military Intelligence (DMI), and the Director of Scientific Intelligence (DSI).

The committee did discuss the matter, and the departmental records of this event state:

U.S. "Project Saucer" was completed about 1950 and it was found desirable to solicit Canadian reports. At the 220th meeting of the Joint Intelligence Committee, on the 12 April 1950, UFOs were discussed and the following decisions were reached:

- (a) The Director of Scientific Intelligence and Director of Air Intelligence were to collaborate in preparing a questionnaire to be distributed to field intelligence officers of the three services and the RCMP.
- (b) Director Air Intelligence is to co-ordinate the investigation arrangements in the field.
- (c) All field reports were to be passed to the Director of Scientific Intelligence for official examination on behalf of the Department of National Defense.¹

On June 29, 1950, a letter was sent from the Director of Air Intelligence to the Director of Scientific Intelligence. In it the DAI noted that a Canadian officer had been dispatched to Washington to learn more about the United States Air Force conclusions regarding Project Saucer. The officer came back recommending that the matter be quietly dropped; there was nothing to the UFO stories. The DAI's letter was followed by another, this time to the Joint Intelligence Committee, on August 4. This second letter further recommended that a questionnaire for investigating sightings not be developed, noting that a questionnaire was not required if the UFO matter was going to be dropped since the Americans had publicly stated that there was nothing to investigate. There is no mention of Bremner in this correspondence.

Despite these recommendations, the JIC did not drop the matter and a questionnaire was indeed drawn up, approved, and sent to field units with reporting instructions, under cover of document file "S21-1-9 (DAI) 19 October, 1950." The "S" in the document file indicates that it was classified "Secret." The number following the "S" is the numerical file number. DAI in brackets means that the covering letter was drafted by the Director of Air Intelligence in spite of his earlier recommendations to drop the subject.

It seems that someone in the Joint Intelligence Committee, or the Minister himself, knew something more about what was going on behind the scenes in Project Saucer. Why else would Claxton order the JIC to act despite the Project Saucer report which had publicly concluded there was nothing to the phenomena? Unless of course there was one conclusion for public consumption and a very different one for internal use, as any who had surmised. This would explain why the DAI's recommendation to drop the study of UFOs was overruled.

(b) Sarbacher evidence of century of US opinion mentioned

Walter
Heron
10/1/7

quality
of
statements

THE UFO FILES

A search for the document of October 19 with the questionnaire has not yet proven successful. Also, there is no clear indication of how many UFO cases were subsequently reported or investigated, but there is evidence of an attempt to keep the matter quiet. Reflecting back on these events, a letter written to the Assistant Chief of the Air Staff (ACAS) in 1957 states: "There has been a recorded instance of October, 1950 . . . that reports would be filed, but investigations would be played down. There has never been an investigation of any report on file at AFHQ."²

*Saibacher
interview*

The last statement is somewhat peculiar, especially given that the minutes of that JIC meeting state that one of the purposes of the questionnaire was to assist field intelligence officers and the Royal Canadian Mounted Police in their investigations.

Smith's Project Magnet and this questionnaire from the Joint Intelligence Committee notwithstanding, in 1952 the Department of National Defence formally organized a group to collect and analyze UFO sightings. Like the Americans with their Project Sign, Project Grudge, and Project Saucer, the Canadian group chose a code name which was perhaps too appropriate: Project Second Storey.

cc: MINISTER
 DE
 C. Douglas
 ADMS
 EXTRA
 DGTR
 ADMSP *la*
 DGSTA
 DRD
 CR

5010-4 (DGTR)

300 Slater Street
 Journal North Building
 Ottawa, Ontario
 K1A 0G8

March 31, 1978

Mr. Arthur Bray
 1157 Agincourt Road
 Ottawa, Ontario
 K2C 2E8

Dear Mr. Bray:

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

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

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

Sig. DGTR
 Inform. _____
 Apprv'd _____
 Approb. _____

Prep. by DRD
 Pr p. par _____
 Aprv'd by _____
 Appr. par _____

Action
 Mesures _____



Government
of Canada

Gouvernement
du Canada

Minister of Communications

Ministre des Communications

Ottawa K1A 0C8

OCT - 2 1979

Mr. X
Editor and Publisher
Consulting Resologist of the
Res Bureaux
Box 1598
Kingston, Ontario
K7L 5C8

Dear Mr. X:

In reply to your letters dated 25 July and 24 August, 1979 requesting information concerning UFO's (Unidentified Flying Objects) and allied phenomena, it is now possible to advise you that this Department has completed a search of our information in relation to this matter.

The late Mr. W.B. Smith, who was employed by the Department of Transport, was quite active in the field of Unidentified Flying Objects and I understand that he termed some of his activities as "Project Magnet". However, these activities were more in the nature of a personal hobby of Mr. Smith who died several years ago. This Department does not maintain an active interest in this subject.

All Project Magnet files that were transferred to this Department were declassified some time ago and these are available for your perusal. If you wish to see these files please contact Mr. W.W. Scott who may be reached at telephone number 992-8061.

With reference to your request for access to files currently being held within the Public Archives, I will be forwarding copies of your correspondence to Mr. W.I. Smith, the Dominion Archivist, and I might suggest that you direct any further enquiries of this nature to him.

Yours sincerely,

David MacDonald

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 ADMSP, and co-ordinate with other Branches as appropriate.

B.C. Blevis

B.C. Blevis

Attach.

c.c. A. Casey-Stahmer

DGTR.

MAR 30 1978

RECEIVED

DOT Smith Request

- con. between Dr. Vanneman Bush and anyone in transport
- con. between Smith and Mr. Wright
Research Board liaison office at the Canadian Embassy in Washington DC.
- Doctor Solandt. Defense Research board on Nov. 20, 1950 and after that (all) Deputy Ministers of Air, Marine and Surface DOT.
- any related documents, memos coming into DOT from other departments such as DND, DRB, and NRC
- con. with Peter Millman ^{Don Observatory} (all)
- all documents relating to the studies behind project Magnet and the discussion (inter-departmental con, memos, meeting) in the Dept of Transport surrounding project 'Magnet' (ref file NO 22-12-33 (TRB) 12-12-39)
- Dr Rose NRC.
- all documents, memo, interdepartmental correspondence on the above subjects from 6650-4 and 5010-4 that were not transferred to -

Maj Donald Keyhoe.
Admiral Knol

Defense Production Minister How

AV - Roe Canada Ltd.

- back from US Naval Oceanographic Office

- Shirley Bay

- JR Baldwins opening and closing of the
flying saucer sighting station at Shirley Bay

Subjects Auto-Car, (UFO, Flying Saucer, ^{Flying} Discs,
Geo-Magnetics, Gravity, Anti-Gravity, ^{Unid Flying} Objects
Radio-Wave Propagation,

- con. with RCMP

- con. with

- all CIRVIS / MERINT reports submitted... only
UFO reports and others per the official regulations
JANAP 146 or 146D or 146E or any other letter
designation

- con. with US Res. & Dev Board.

from 1947 to 1961

^{CIA}
FBI, JRDB, DRDB, OSI in the US..

- with Dr. R.I. Sarbacher, Dr. Eric Walker

- anyone in AFHQ

- to or from ~~Canadian~~ DRB Experimental Station at Suffield
Alberta

According to Jacobo, David Michael
"The 1962 Outbreak in America" P. 131
Michael Smith was ~~the~~ a member of the
"Interpreted group of special advisors"
see Keyhole top secret P. 20
see USO Ametigitor July 1957 PP 28, 30
P. 153

According to Jacobo
Smith travelled to Maine in 1959.
He introduced a woman who claimed to
be able to contact "space men" this
a hoax.

see Robert J. Friend "Memorandum
for the Record" n.d. (MRTB) entire
with Robert Friend January 1974.

Robert Friend - Chief of Project Blue Book
had int. - contacts information to Report
see Report 1959, revision PP. 270-71
Report. and Friend (psychologist) and
May 5, 1959, and once a month till end
of 1960

see (21-22)

Colonel H. W. Gilbert to Lt.

Colonel Parris, Disposition form

"Unidentified F.O. Advisory Panel" 16 March

1959. (MAFB): Colonel V.C. Rothman to

Theodore Hiatt 29 April 1959 (MAFB)

Rothman to Chaplain Graham 8 May 1959

(MAFB) R.S. Friend "AFCIN-4E4g

Weekly Activity Report 8 May 1959 (MAFB)

- Memorandum for the Record "Meeting

of UFO Panel" 7 April 1960, 12 April 1960

(MAFB) interview with J. Allen Hynek

27 September 1972.

146 Friend Major R.S. Oct 1958

Studied physics in graduate school.

Supplied Hynek with sightings

PROJECT BLUE BOOK

There is in the Technical Analysis Branch of ATIC a section which deals with the reports of sightings of unknown objects and this work is carried on under the code name "Project Blue Book." Lieutenant E. Ruppelt, USAF is the officer in charge of this section. This officer disclosed the following information on their current project.

ATIC have a five-year back log of reports which number at least 700. All reports received are studied carefully and checked for the obvious such as meteors, aircraft balloons etc. If further information is required, action is taken to interrogate the observer and to complete a questionnaire. Copy of this questionnaire is attached. The information is then transferred to a project record card (attached) which lists relevant data such as, time of sighting, shape, size, location etc. This information is cross-indexed and then filed. There is a Project Stork at Columbus where scientists assist ATIC in the breakdown of flying saucer data and in the preparation and revision of the questionnaire.

The more reliable sightings have been plotted on a map and it is noted that there are certain patterns of sightings around major port areas, and atomic energy establishments except Hanford, Oregon.

The following statistics on the sightings were noted.

- (a) Twenty-five per cent of all observations were described as a silver sphere in shape; about one half of these objects moved across the sky and the remainder manoeuvred.
- (b) Fifty per cent of all reports described the object as having a "Delta-wing" shape. ATIC advise that a thorough check disclosed that at the time of any of these sightings, there were no USA delta-wing type aircraft airborne.
- (c) Ten per cent of the unknown objects were described as "rocket shaped".
- (d) One per cent were described as a group of lights.
- (e) Five per cent of reports came from scientists at White Sands.
- (f) Fifteen per cent from military pilots.
- (g) Five per cent from civilian airline pilots.
- (h) Two per cent from weather observers.

Lieutenant Ruppelt advised that most of the reports on file over the last four years came from military sources and that reports from civilian sources for the most part are not considered too reliable and are therefore not being used for the present in their analyses. At one time, it was considered that the co-operation of the Observer Corps might be sought but because of the risk of hysteria the idea was dropped.

It was pointed out that flying saucer reports over the last two years have come in peaks and the peaks come at the same time each year (May).

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

August 7, 1984.

Mr. Grant R. Cameron,
1413 - 77 University Cres.,
Winnipeg, Manitoba,
R3T 3N8.

Dear Grant:

My answers to your questions are as follows:

File 5010-4 - I perused all five volumes of this file in Dept. of Communications (DOC) at various times from 1976 to 1979. The full story of this is on pages 46 to 48 of The UFO Connection.

File 6650 - 4 is now vol. 5 of 5010-4 (p.48). This is the formerly classified file. The postscript on Roger Cote's letter of July 4, 1984 is correct.

DGTRS means Director General, Telecommunication Regulatory Service, DOC.

DGSTA is Director General Space Technology Applications in DOC, which, by the way, I feel has no bearing on all this, as he was just a middle man passing along my request for info, which I sent to the Minister of Communications (Jeanne Sauvé at that time).

File 22-12-33 is now vol. 5 of file 5010-4 in DOC. It was originally classified secret, was down-graded to confidential (becoming 6650-4) and was again down-graded, to unclassified, (becoming 5010-4 vol. 5).

Wilson Mr. W. J. Wilson, Transport Research Board.

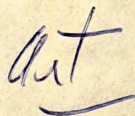
My book is available, from me, at \$14.95 hardcover and \$8.50 paperback.

What are the file numbers of the "new" files which have emerged? I may already have info on them, which may make your task easier.

I have made no requests under the Access to Information Act as I have already viewed all the files which I know exist. If there are others, it may be reason to file a request.

I feel that you are wasting your time seeking info from file 5010-4 (5 vols.) as I have summarized the important information in The UFO Connection, as noted above, and also in Chapter 7. I published all this info to save other researchers the task of doing it over and over again. The only place you will find additional data, is if there are other files of which I am not aware. Please let me know if there are.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'at' with a stylized flourish underneath.

Arthur Bray.

QUESTIONS

(Questions answered orally are indicated by an asterisk.)

*INVESTIGATION OF UNIDENTIFIED
FLYING OBJECTS

Question No. 1,416—Mr. Winch:

1. Is Canada co-operating with the special United States program for investigation of unidentified flying objects and, if so, is this entitled "Project Magnet"?
2. Is "Project Magnet" an unpublicized world-wide operation, using specially equipped, super constellations, non-uniformed pilots and civilian scientists?
3. Was the late Willbert B. Smith, a government scientist, the head of the Canadian section of the U.F.O. research operation?
4. Is any data available from "Project Magnet" to the general public?

Mr. Dupuis: 1. The R.C.A.F. co-operates with the United States in the investigation of reports of unidentified flying objects as in other matters of mutual interest, but not as part of a special program. The United States program known as "Project Magnet" is not directed to the investigation of unidentified flying objects.

2. "Project Magnet" is a program conducted by the naval oceanographic office of the U.S. navy concerned with the compilation of geo-magnetic data covering all the oceans of the world. The data are obtained in survey flights of U.S. navy aircraft carrying civilian scientists. Information concerning this program has been freely available for some years to interested scientists.

3. Between December, 1950 and August, 1954 a small program of investigation in the field of geo-magnetics was carried out by the

then telecommunications division of the Department of Transport with a view to obtaining, if possible, some physical information or facts which might help to explain the phenomenon which was generally referred to as unidentified flying objects. Mr. W. B. Smith was the engineer in charge of this program.

4. It is understood that data obtained in "Project Magnet", in the form of geo-magnetic charts, is available upon application to the naval oceanographic office of the U.S. navy.

HANSARD, 4 Dec. 1963



DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

3
5-51

OTTAWA, Ontario, September 10, 1952

PLACE

DATE

YOUR FILE

SUBJECT

OUR FILE

MEMORANDUM

In order to ascertain the reliability of random observations and reports from the public and press of objects seen in the sky a flare of approximately 1,000 candle power was burned for one minute over the outskirts of Ottawa. Two simultaneous observations of the flare were made by transit from two locations. Location A was at the Ottawa Monitoring Station and Location B was at Uplands Airport.

Sept 8 - 1952

At 21.45 E.S.T. a balloon and fused flare were released from Location A. At 21.51 E.S.T. the flare ignited and burned for one minute or until 21.52 E.S.T. The bearings obtained were as follows:

	<u>Azimuth</u>	<u>Elevation</u>
Location A	46.35° E. of N.	20°
Location B	3.5° W. of N.	12.5°

These angles would place the balloon over the Rideau Canal near Dow's Lake at an elevation of 1.1 miles.

The flare was clearly visible from Ottawa and did not resemble a meteor or northern lights. It could not be mistaken for a star and could not be associated with the moon which was on the eastern horizon. It could not be mistaken for a plane, since it was soundless and flashed only for a short time from an almost stationary position.

There was no mention made of this object in the newspapers.

Sept 8

J. H. Thompson
(J. H. Thompson)

Scale = 1"=2'

Scale = 1"=4'

Note to File:

PROJECT MAGNET

A covering memo to the Interim Report on Project Magnet in Department of Communications file 50IO-4 vol.5 (confidential) identifies Mr. W.G.Robson, Mr. R.H.Cairns and Mr.J.H. Thompson as members of the Magnet Group. Robson and Cairns resigned before the Report was completed.

Arthur Bray
Arthur Bray

Project Magnet (U.S. NAVY)

See Tapside No. 16, 1965.

P.12.

Note to File:

8 August, 1979

PROJECT MAGNET

W.B.Smith memorandum dated 21 November, 1950, (formerly Top Secret, now Confidential), wherein Smith sought approval to set up Project Magnet is contained in Department of Communications file 5010-4 vol. 5. This original copy contains the approval of C.P. Edwards, in his handwriting, as follows:

"Go ahead with it and keep me posted from time to time - C.P. Edwards 2/12/50"

This proposal was concurred with by G.C.W.B. on 22/II/50.
(These are the initials of G.C.W. Browne)


Arthur Bray



FEB 15 1977

Mr. Jack Murta, M.P.
Room 450 WB
House of Commons
Ottawa, Ontario

Dear Mr. Murta:

This is further to my interim reply of January 24, 1977 to your letter of January 19, 1977, concerning a request from one of your constituents for assistance in locating reports on Unidentified Flying Objects filed some years ago by Mr. Wilbert Smith who once worked in this Department.

My officers have attempted to locate the dormant Transport files which would have carried these reports but, unfortunately, the volumes relating to the periods Mr. Smith was active in this work have been destroyed as is normal for all files of this age.

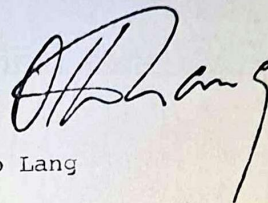
In carrying out their research on the matter, my officers found that Mr. Smith's widow still resides in Ottawa and they spoke with her regarding your inquiry. Mrs. Smith still has many of her husband's papers on the subject in which your constituent is interested, including a book published a short time before his death. Mrs. Smith expressed a willingness to discuss your constituent's requirements with him if he would get in touch with her. Mrs. Smith's address is 810 Canterbury Avenue, Apartment 507, Ottawa, Telephone 521-2032.

Your constituent may also find assistance in his project if he would contact Dr. P.M. Millman and Dr. A.G. McNamara of the Herzberg Institute of Astrophysics, Planetary Sciences Section, National Research Council, Ottawa K1A 0R6. The Planetary Sciences Section is the depository of all Canadian reports on Unidentified Flying Objects. Dr. Millman worked directly with Mr. Smith on

Place de Ville
Ottawa
K1A 0N5

several projects in the area of interest. Dr. McNamara, as head of the Planetary Sciences Section, would be the best contact in requesting copies of any material on his Section's files. Dr. Millman may be reached by telephone at Government local 996-9345 and Dr. McNamara at 992-6511.

Yours sincerely,

A handwritten signature in dark ink, appearing to read 'O. Lang', with a stylized, cursive script.

Otto Lang

REPRINT OF PROJECT MAGNET REPORT



NATIONAL RESEARCH COUNCIL OF CANADA
CONSEIL NATIONAL DE RECHERCHES DU CANADA

OTTAWA 7.

NOTE ON PROJECT MAGNET REPORT

I have been informed by the Department of Transport that although Project Magnet was officially authorized by the Department, work on this Project was carried out almost entirely by Mr. W. B. Smith and was in the nature of a spare-time activity. The conclusions reached in this report are entirely those of Mr. Smith, and do not represent an official opinion of either the Department of Transport or of the Second Storey Committee.

Peter M. Millman

May 9, 1968
Ottawa, Ontario

Peter M. Millman
Head of Upper Atmosphere Research
National Research Council
(Formerly Chairman of Project
Second Storey Committee)

PROJECT MAGNET REPORT

During the past five years there has been accumulating in the files of the United States Air Force, Royal Canadian Air Force, Department of Transport, and various other agencies, an impressive number of reports on sightings of unidentified flying objects popularly known as "Flying Saucers". These files contain reports by creditable people on things which they have seen in the sky, tracked by radar, or photographed. They are reports made in good faith by normal, honest people, and there is little if any reason to doubt their veracity. Many sightings undoubtedly are due to unusual views of common objects or phenomenae, and are quite normal, but there are many sightings which cannot be explained so easily.

Project Magnet was authorized in December, 1950, by Commander C. P. Edwards, then Deputy Minister of Transport for Air Services, for the purpose of making as detailed a study of the saucer phenomenae as could be made within the framework of existing establishments. The Broadcast and Measurements Section of the Telecommunications Division were given the directive to go ahead with this work with whatever assistance could be obtained informally from outside sources such as Defence Research Board and National Research Council.

It is perfectly natural in the human thinking mechanism to try and fit observations into an established pattern. It is only when observations stubbornly refuse to be so fitted that we become disturbed. When this happens we may, and usually do, take one of three courses. First, we may deny completely the validity of the observations; or second, we may pass the whole subject off as something of no consequence; or third, we may accept the discrepancies as real and go to work on them. In the matter of Sancer Sightings all three of these reactions have been strikingly apparent. The first two approaches are obviously negative and from which a definite conclusion can never be reached. It is the third approach, acceptance of the data and subsequent research that is dealt with in this report.

The basic data with which we have to work consist largely of sightings reported as they are observed throughout Canada in a purely random manner. Many of the reports are from the extensive field organization of the Department of Transport whose job it is to watch the sky and whose observers are trained in precisely this sort of observation. Also, there are in operation a number of instrumental arrangements such as the ionospheric observatories from which useful data have been obtained. However, we must not expect too much from these field stations because of the very sporadic nature of the sightings. As the analysis progresses and we know more about what

to look for we may be able to obtain and make much better use of field data. Up to the present we have been prevented from using conventional laboratory methods owing to the complete lack of any sort of specimens with which to experiment, and our prospects of obtaining any in the immediate future are not very good. Consequently, a large part of the analysis in these early stages will have to be based on deductive reasoning, at least until we are able to work out a procedure more in line with conventional experimental methods.

The starting point of the investigation is essentially the interview with an observer. A questionnaire form and an instructional guide for the interrogator were worked out by the Project Second Storey Committee, which is a Committee sponsored by the Defence Research Board to collect, catalogue and correlate data on sightings of unidentified flying objects. This questionnaire and guide are included as Appendix I, and are intended to get the maximum useful information from the observer and present it in a manner in which it can be used to advantage. This form has been used so far as possible in connection with the sightings investigated by the Department of Transport.

A weighting factor is assigned to each sighting according to a system intended to minimize the personal equation. This weighting system is described in Appendix II. The weighting

factor may be considered as the probability that the report contains the truth, the whole truth and nothing but the truth, so far as the observer and interrogator are aware. It has nothing to do with the nature of the object claimed to be seen. It is in a sense analagous to the order of precision with which a measurement may be made, and for the purpose of this analysis this is precisely the manner in which it is used.

Sightings may be grouped according to certain salient features, and the combined weight of all pertinent observations with respect to these features may be determined by applying Peter's formula, which is a standard mathematical technique for determining probable error.

$$r_o = \frac{.8453}{n \sqrt{n - 1}} (v_1 + v_2 + v_3 + \dots + v_n)$$

where r_o is the probable error of the mean, n is the number of observations and v is the probable error of each observation, that is, unity minus the weighting factor. This method has the advantage of being simple and easy to use and enables a number of mediocre observations to be combined effectively into the equivalent of one good one.

The next step is to sort out the observations according to some pattern. The particular pattern is not so important as the fact that it should take account of all contingencies

however improbable they may appear at first sight. In other words, there must be a compartment somewhere in the scheme of things into which each sighting may be placed, comfortably, and with nothing left over. Furthermore, it must be possible to arrive at each appropriate compartment by a sequence of logical reasoning taking account of all the facts presented. If this can be done, then the probability for the real existence of the contents of any compartment will be the single or combined weighting factor pertinent to that single or group of sightings. The charts shown in Appendix III were evolved as a means for sorting out the various sightings and provide the pattern which was used in the analysis of those sightings reported to and analysed by the Department of Transport.

Most sightings fit readily into one of the classifications shown, which are of two general types; those about which we know something and those about which we know very little. When the sightings can be classified as something we know about, we need not concern ourselves too much with them, but when they fit into classifications which we don't understand we are back to our original position of whether to deny the evidence, dismiss it as of no consequence, or to accept it and go to work on it. The process of sorting out observations according to these charts and fitting them into compartments can hardly be considered an

end in itself. Rather, it is a convenience to clarify thinking and direct activity along profitable channels. It shows at once which aspects are of significance and which may be bypassed. Merely placing a sighting under a certain heading does not explain it; it only indicates where we may start looking for an explanation.

Appendix IV contains summaries of the 1952 sightings as investigated by the Department of Transport. Considerably more data exists in the files of other agencies, and more is being collected as the investigations proceed. While it is not intended to make any reference to an analysis of the records of other agencies, it may be said that the Department of Transport sightings are quite representative of the sightings reported throughout the world. The following is a table of the breakdown of the 25 proper sightings reported during 1952.

NATURE OF SIGHTING	NUMBER	WEIGHT
Probably meteor.....	4.....	91%
Probably aircraft.....	1.....	69%
Probably balloons.....	1.....	74%
Probably marker light.....	1.....	64%
Bright speck at night, not star or planet.....	3.....	75%
Bright speck daylight, not star or planet.....	1.....	68%
Luminous ring.....	1.....	68%
Shiny cone.....	1.....	53%
Circular or elliptical body, shiny day.....	5.....	88%

NATURE OF SIGHTING	NUMBER	WEIGHT
Circular or elliptical body luminous night.....	5.....	90%
Unidentified lights of various kinds.....	2.....	77%
TOTAL NUMBER OF PROPER SIGHTINGS.....	25.....	96%

With reference to the above table, of the four cases identified as probably meteors, their weight works out at 91%, which is the probability that the observers actually did see meteors which appeared as they described them. Considering the circular or elliptical bodies together, their weight works out at 91% for the ten sightings, from which we may conclude that SOMETHING answering this description was actually observed. Similarly we may consider each of the other groups of sightings, taking account of the probability that the observations are reliable.

It is not intended to describe here in detail the intricate and tedious processes by which the sightings are evaluated, beyond the fact that the pattern set forth in the charts in Appendix III is followed. The cardinal rule is that a sighting must fit completely under one or more of the chart headings, with nothing left over and without postulating any additions, deletions, or changes in the facts as reported. Should there be no suitable heading, then obviously the charts must be expanded to provide one, in fact this was the evolution of these charts. Where a sighting may be fitted under more than one heading an arbitrary division of the probability of finding it under each applicable heading is assigned. The sum of such

probability figures must of course be unity, and the probability for the real existence under any particular heading is the product of this probability figure and the reliability or weighting factor for the sighting concerned.

It is apparent that the judgement of the people doing the evaluating is bound to enter the picture and may produce substantial numerical differences with reference to sightings listed under certain headings. However, since many headings are automatically eliminated by the nature of the facts available, the discrepancies are confined to the probability figures for the distribution under the remaining headings which are considered eligible, and we end up with definite classifications for the sightings with SOME probability figure for the reality of each group. This has the effect of forcing those who are doing the evaluating to face the reported facts squarely, pay meticulous attention to them, and place each sighting honestly under the only headings where it will fit.

In working through the analysis of the proper sightings listed, we find that the majority of them appear to be of some material body. Of these, seven are classed as probably normal objects, and eleven are classed as strange objects. Of the remainder, four have a substantial probability of being material, strange, objects, with three having a substantial probability of being immaterial, electrical, phenomenae. Of the eleven strange objects the probability definitely favours the alien

vehicle class, with the secret missile included with a much lower probability.

The next step is to follow this line of reasoning as far as possible so as to deduce what we can from the observed data. Vehicles or missiles can be of only two general kinds, terrestrial and extra-terrestrial, and in either case the analysis enquires into the source and technology. If the vehicles originate outside the iron curtain we may assume that the matter is in good hands, but if they originate inside the iron curtain it could be a matter of grave concern to us.

In the matter of technology, the points of interest are: - the energy source; means of support, propulsion and manipulation; structure; and biology. So far as energy is concerned we know about mechanical energy and chemical energy, and a little about energy of fission, and we can appreciate the possibility of direct conversion of mass to energy. Beyond this we have no knowledge, and unless we are prepared to postulate a completely unknown source of energy of which we do not know even the rudiments, we must conclude that the vehicles use one of the four listed energy sources. Unless something we do not understand can be done with gravitation, mechanical energy has little use beyond driving model aircraft. We use chemical energy to quite an extent, but we realize its limitations, so if the energy demands of the vehicles exceed what we consider to be the reason-

able capabilities of chemical fuels, we are forced to the conclusion that such vehicles must get their energy from either fission or mass conversion.

With reference to the means for support, propulsion and manipulation, unless we are prepared to postulate something else quite beyond our knowledge, there are only the two groups of possibilities, namely the known means and the speculative means. Of the known means there is only physical support through the use of buoyancy or airfoils, the reaction of rockets and jets, and centrifugal force, which is what holds the moon in position. Of the speculative means we know only of the possibility of gravity waves, field interaction and radiation pressure. If the observed behaviour of the vehicles is such as to be beyond the limitations which we know apply to the known means of support, then we are forced to the conclusion that one of the speculative means must have been developed to do the job.

From a study of the sighting reports (Appendix IV), it can be deduced that the vehicles have the following significant characteristics. They are a hundred feet or more in diameter; they can travel at speeds of several thousand miles per hour; they can reach altitudes well above those which would support conventional aircraft or balloons; and ample power and force seem to be available for all required manoeuvres. Taking these factors into account, it is difficult to reconcile this performance

with the capabilities of our technology, and unless the technology of some terrestrial nation is much more advanced than is generally known, we are forced to the conclusion that the vehicles are probably extra-terrestrial, in spite of our prejudices to the contrary.

It has been suggested that the sightings might be due to some sort of optical phenomenon which gives the appearance of the objects reported, and this aspect was thoroughly investigated. Charts are shown in Appendix III showing the various optical considerations. Enticing as this theory is, there are some serious objections to its actual application, in the form of some rather definite and quite immutable optical laws. These are the geometrical laws dealing with optics generally and which we have never yet found cause to doubt, plus the wide discrepancies in the order of magnitude of the light values which must be involved in any sightings so far studied. Furthermore, introducing an optical system might explain an image in terms of an object, but the object still requires explaining. A particular effort was made to find an optical explanation for the sightings listed in this report, but in no case could one be worked out. It was not possible to find so much as a partial optical explanation for even one sighting. Consequently, it was felt that optical theories generally should not be taken too seriously until such time as at least one sighting can be satisfactorily explained in such a manner.

It appears then, that we are faced with a substantial probability of the real existence of extra-terrestrial vehicles, regardless of whether or not they fit into our scheme of things. Such vehicles of necessity must use a technology considerably in advance of what we have. It is therefore submitted that the next step in this investigation should be a substantial effort towards the acquisition of as much as possible of this technology, which would without doubt be of great value to us.



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