

D. D / U.A.R./N

FILE NO. 201-214

NON - METEORITIC SIGHTING

NATIONAL RESEARCH COUNCIL

UAR/REED

DND / UAR
201-214

PRIORITY

HHHVVV PCB015VVV PWA002 JZA075

UU

PCBC

DE RCWPJZ 49 23/2229Z

Nov 24 00 07 '67

P R 232220Z NOV 67

O.P.I.

CFOC

FM CANFORBASE MOOSE JAW

RCWPC/CANFORCEHED-

INFO RCWPC/CANTRAINCOM

BT

UNCLAS M898

1 FOR CFOC UFO REPORT REF CFAO 71.6

A 0705 7 NOV 67

B CLEAR AND DARK, JUST PRIOR DAYBREAK

C 27764 SGT AH WATERS

D WALKING SE FROM BASE HQ BLDG

E N/A

F APPEARED AS VERY BRIGHT LIGHT IN SOUTH EAST DIRECTION AT AN ALTITUDE OF 3 TO 4,000 FEET. THE LIGHT WAS STATIONARY WHEN FIRST OBSERVED AND REMAINED SO FOR A PERIOD OF APPROX 12-15 SECONDS. DURING THE STATIONARY PERIOD THERE WAS A NOTICEABLE INCREASE AND DECREASE OF LIGHT INTENSITY AND WHAT APPEARED TO THE OBSERVER AS SMALL MOONS ARCING THE OUTER PERIMETER OF LIGHT. THERE WAS A SLOW UPWARD MOTION OF THE LIGHT FOR APPROX 3-4 SECONDS AT WHICH TIME IT APPEARED TO THE OBSERVER TO BE ELONGATED IN SHAPE. THERE

PAGE 2 RCWPJZ 49 UNCLAS

WAS A RAPID INCREASE IN SPEED AFTER THE INITIAL MOTION WAS OBSERVED IN AN UPWARD AND SLIGHTLY SW DIRECTION.

G APPROX 20-25 SECONDS

H NIL

BT

PRIORITY

65

201

NNNNVV

Nov 21 18 43 '67

O.P.I.

c FOC

PRIORITY

No further action reg'd.

VV ICA271PEA2820EB201 COA107

UU

PP RCCMC

DE RCEOC 123 21/1738Z

P 211737Z NOV 67

FM RCC HALIFAX

TO RCCMC/CANFORCEDHED

INFO ZEN/CANMARCOM

RCEOC/CANFORBASE GREENWOOD

BT

UNCLAS RCC 027

FOR CROC

UFO REPORT

BLWING RECEIVED FROM DEPARTMENT OF FISHERIES VESSEL CYGNUS
QUOTE - AT 210940Z LEFT SHELburne AT 4 AM AST AND ABOUT 4.10 AM
A LIGHT CAME SEAWARD WEST OF CAPE ROSEWAY (4337N 6518W) AND
PROCEEDED TOWARD CAPE NEGRO (4331N 6522W). HAVE BEEN WATCHING IT
FOR APPROXITATELY ONE HOUR AND FORTY MINUTES AND FOR LAST TWENTY
MINUTES SEEMS STATIONERY. JUST A BRIGHT LIGHT OVER EAST POINT
(4332N 6522W) BRIGHT ENOUGH FOR US TO SEE BUILDINGS ON LAND.
OUR POSIION ABOUT THREE MILES OFF CAPE NEGRO, UNABLE TO PICK
UP ON RADAR BU STILL QUITE VISIBLE. UNQUOTE

BT

61 203

PRIORITY

NNNNVV PC235GJA085 UU

Nov 21 13 02 '67

PP RCCWC

O.P.I. C FOC

DE RCCPGJ 64 21/1758Z

P 211800Z NOV 67

FM CANFORBASE TORONTO

TO RCCRC/CANLIFTCON

RCCRC/RCC TRENTON

RCCWC/CANFORCED ✓

*No further action necessary.
Letter of thanks
23 Nov*

*let's write
DOR 4*

NOV 21 13 21 '67
CAND OPERATIONS CENTRE

BT

UNCLAS ATC33

UFO SIGHTING. CONSTABLE FRENCH OF ONTARIO PROVINCIAL POLICE HQ,
KEELE STREET AND 401 HIGHWAY TORONTO, REPORTS SEEING A LARGE, ROUND
OBJECT WITH GREEN RED AND WHITE FLASHING LIGHTS MOVING SLOWLY
SOUTH IN LEVEL FLIGHT. OFFICER WAS IN A POLICE CRUISER ON HIGHWAY 27
400 AND 11 SOUTH OF A LINE BELOW COOKSTOWN CLOVERLEAF. THE OBJECT
HEADED SOUTH OVER LAKE SIMCOE UNTIL SIGHT LOST IN NEWMARKET AREA.
OFFICER SUBMITTING REPORT TO OWN HQ. ATC MALTON WAS ADVISED BY OPP.
WEATHER AT TIME SIGHTING 0330 LOCAL TO 0400 LOCAL FOR YZ
N30 BROKEN VISIBILITY BETTER THAN 15, FOR BORDEN 230 THIN BROKEN
VISIBILITY BETTER THAN FIFTEEN

BT

202

V 2000-4 (D Ops)

Canadian Forces Headquarters
Ottawa 4, Ontario

27 November, 1967

Constable French
Ontario Provincial Police Headquarters
Keele Street and 401 Highway
Toronto, Ontario

Dear Sir:

Your sighting report of an Unidentified Flying Object has been passed to this office for evaluation.

Your interest in reporting this matter is appreciated, and if further information is required, an officer of the Canadian Forces will be in touch with you. Thank you for your co-operation.

Yours truly,

W. W. Turner
W. W. Turner
Colonel
Director Operations

W/C DF Robertson/2-5427/lv
Ops 4
Circ
File

202

NOV 21 10 50 '67

Mail ③

SOPS ③

VV PCA179SCA117VVV

NFA006

UU

RR RCCWC

DE RCCSNF 6 21/1324Z

R 211300Z NOV 67

FM CANDEFRAD FALCONBRIDGE

TO RCCWC/CANFORCED OPS ✓

INFO RCCPGJ/ROYAL ASTRONOMICAL SOCIETY OF CANADA, COLLEGE ST.,

TORONTO 2B, ONTARIO

RCCWC/METEOR CENTRE, NATIONAL RESEARCH COUNCIL, OTTAWA 2 ONTARIO ✓

BT

UNCLAS CES567

(A) 210150Z

(B) OVERCAST

(C) COPPERCLIFF ONT

(D) ONE OBJECT

(E) VERY BRIGHT NO SHADOWS

(F) SPOT LIKE BRIGHT RED LIGHT TWIRLING TURNING TO WHITE LIGHT

(G) LARGER THAN A STAR SMALLER THAN THE MOON OVAL SHAPE

(H) FIFTEEN MINUTES

(J) NO

(K) 45 DEGREES ABOVE HORIZON

(L) NIL

(M) NANCY SCHILIKIE 45 STERPENTIN ST. COPPERCLIFF ONT

BT

61

204

No further action req'd.
 Letter of thanks
 23 Nov

CFHQ OPERATIONS CENTRE
 NOV 21 15 09 '67
 DOPS 0

V 2000-4 (D Ops)

Canadian Forces Headquarters
Ottawa 4, Ontario

27 November, 1967

Miss Nancy Schilikie
45 Sterpentin Street
Coppercliff, Ontario

Dear Miss Schilikie:

Your sighting report of an Unidentified Flying Object has been passed to this office for evaluation.

Your interest in reporting this matter is appreciated, and if further information is required, an officer of the Canadian Forces will be in touch with you. Thank you for your co-operation.

Yours truly,

W. W. Turner
W. W. Turner
Colonel
Director Operations

W/C DF Robertson/2-5427/lv
Ops 4
Circ
File

204

DEPARTMENT OF NATIONAL DEFENCE		SECURITY CLASSIFICATION
MINUTE SHEET		FILE NUMBER
REFERENCE	DATED	
REFERRED TO	REMARKS (To be signed in full showing Appointment, Telephone Number and Date)	
DSC Mr. [Signature] ✓ DDP04 W. Robertson	Attached for general interest and return please. 2. If NRC accept the responsibility for investigating UFOs & they work with U of T in cooperation with DND, in my opinion, we are on the right track. 4 Oct. W. Robertson wk DOPS & Thanks W. Robertson DSC/DDP04 24 Nov 67	

DND 317
7530-21-505-7241

DJP

Advice on what to do when encountering a UFO

A U.S. astronomer yesterday gave a seminar of scientists and graduate students at the University of Toronto's Institute for Aerospace Studies the benefit of his 50 years of experience in assessing unidentified flying objects.

The astronomer was Dr. J. Allen Hynek, director of the astronomy department at Northwestern University and an adviser to the U.S. Air Force and to a University of Colorado study of UFOs. The seminar was being held in connection with the establishment of a Canadian UFO study by the Aerospace Institute.

Dr. Gordon Patterson, director of the Institute, recently announced the study as a counterpart to a U.S. study directed by Dr. Edward Condon of the University of Colorado. Yesterday he said the institute would set up a division in the Dept. of UFO studies.

The division will include seven faculty members headed by Dr. Ron Peterson, assistant professor of aerospace studies. Dr. Patterson said the division will contain as many scientific disciplines as possible and would include clerical personnel to receive information on UFO sightings.

"It is well known that many scientists feel that the whole subject is balderdash, but their feelings are too often based on little study," Dr. Patterson said. That is an un-

tenable position for a scientist, he said.

Dr. Hynek — a grey-haired man with a grey mustache and glasses — told the group what type of study he felt would be useful, and even told them what to do if they saw one.

In the heat of television lights, he began by relating his early skepticism about UFOs when he was consulted by the U.S. Air Force. "My own conclusion after more than 12 years is that the nonsense school of UFOs is as

dead as the theory of the steady-state universe. I don't have answers, but I believe there is a signal in the north."

He said he had long called for a serious search effort on UFOs and he was happy with the plan to start one in Canada. He said the Condon study was an indication that the subject is being taken seriously in the United States, too.

Asked later for his personal convictions about UFOs, he said: "I think I wouldn't be a

scientist if I said I had any beliefs or convictions... Belief belongs far more in theology than in science... All I am prepared to say at the moment is that I cannot countenance the nonsense school of UFOs. I believe it is an phenomenon that belongs in our natural world. But what it is, I do not know."

Dr. Hynek acknowledged that the UFO field is full of noise. He said he had been told, for example, that the Second Coming would be effected on a flying saucer.

But there is also a wide interest in the phenomenon. The turnout at the seminar was an example, he said. Last week at Los Alamos, site of a big U.S. scientific centre, almost 900 persons turned out while at Goddard Space Flight Centre, almost the entire scientific staff turned out to hear him.

A Gallup Poll reported that of all the questions ever asked, more people were aware of UFO phenomena than any other. Fifty million Americans believe that UFOs

are something more than figments of the imagination, and 5 million reported having had a UFO experience, Dr. Hynek said. Yet at the same time, the U.S. Air Force had received only 15,000 reports.

At first, he thought the whole thing was a craze like the blue hoop or eating goldfish, and that it was a purely U.S. phenomenon.

But reports have continued on a world basis, he said, coming from more than 70 countries.

He said that only by getting scientific instruments to give actual readings of UFO sightings could real results be obtained.

A team might go to UFO sighting areas carrying cameras, a spectrograph and tape recorder, and "bring 'em back alive."

At a press conference, Dr. Hynek said he believes less than 5 per cent of UFO sightings are hoaxes. He acknowledged that UFOs seem to violate the laws of classical physics, and he said they act much as if they were images rather than actual objects.

Asked what one should do if one encountered a UFO, Dr. Hynek said:

First, get witnesses. A single witness is no witness at all. Second, note the time, take pictures if you have a camera, try to assign numbers to the rate of travel and size. Note the wind direction. And immediately set down on paper a narrative description.

206

UFO's No Threat To Nation?

(By The CP) — Checks on unidentified flying objects will be made by civilian scientists in future because the military has found no sign that the UFOs threaten national security, it was disclosed Wednesday.

The National Research Council announced consultations are nearly complete on transferring the responsibility to its space research facilities branch from the defence department.

Dr. R. S. Rettie, chief of the branch, said in an interview that defence officials have felt for some time the UFOs represent no threat to the country's security.

The space research facilities branch already runs the rocket range at Churchill, Man., and has responsibility for the scientific sounding rocket program.

Dr. Rettie said his branch will "filter" reports of sightings. Some would be of definite scientific interest, such as reports of meteorites or fireballs, especially where there was evidence that material had reached the ground.

Part of the role will be in reassuring the public, he said.

file

Ottawa 4, November 15, 1967.

3/14

The Honourable C.M. Drury, P.C., M.P.,
Minister of Industry,
Ottawa.

My dear Colleague,

I concur in the view, expressed in your letter of October 23rd, that it is unnecessary and wasteful of effort to investigate all reported UFO sightings. However, there are examples of recent sightings that have caused considerable local public concern and therefore required investigation by a government agency.

Most frequently reported are sightings of aerial phenomena which, in general, cannot be fruitfully investigated after the event. Occasionally, however, there are associated physical phenomena on the ground that require scientific investigation. As examples, reports of investigations into three recent occurrences in that category are attached.

As you say, a judicious sampling procedure is required. It is suggested that all reports of sightings be channelled to the National Research Council, where the decision on the necessity for scientific investigation would be made. It is agreed that participation of field units of other departments, including DND, would be required.

In order to proceed with the development of effective procedures, would you have an appropriate staff member of NRC contact Dr. H. Sheffer, Scientific Assistant to the Vice Chief of the Defence Staff.

Yours sincerely,

ORIGINAL SIGNED BY
L CADIEUX

cc Secretary Defence Staff

207

MINISTER OF INDUSTRY



CANADA

MINISTRE DE L'INDUSTRIE



The Honourable L. Cadieux, P.C., M.P.,
Minister of National Defence,
125 Elgin Street,
Ottawa, Canada

12 December 1967

My dear Colleague,

Thank you for your letter of November 15 concerning U.F.O. sightings and for the attached examples of recent occurrences.

In order to take up your suggestion that effective procedures for reporting be developed so that careful decisions can be made as to the need for further investigations of specific selected cases, I have arranged that Dr. R.S. Rettie, Chief of the Space Research Facilities Branch of the National Research Council will get in touch with Dr. H. Sheffer, Scientific Assistant to the Vice Chief of the Defence Staff.

Yours sincerely,

C.M. Drury

DEC 14 1967

Minister

207



*Bill
File*

NRC news release

NATIONAL RESEARCH COUNCIL

OTTAWA 7, CANADA

TEL. 99-3-9101

① FOR IMMEDIATE RELEASE

If consultations between the Department of National Defence and the National Research Council of Canada are concluded, as expected, the Space Research Facilities Branch of NRC will soon be acting as a clearing house to determine whether reports of unidentified flying objects should be investigated, the Council said today.

When the Branch receives information on a specific case, this information will be examined to determine whether there are any scientific reasons which would warrant further investigation. The extent of the initial examination in terms of time and expenditure will depend on the nature of the information received.

If this initial examination shows that a further investigation is warranted, other agencies, such as the Department of National Defence, may be called on for assistance since NRC has no field capabilities to conduct such further investigation. Such further investigation will not be recommended unless it is also clearly evident that such further investigation will have scientific significance.

② - 30 -

D Ops (Colonel Turner)

January 1968

You may find this interesting.

I have kept a copy for a book I plan to write after I retire - "The Power of Negative Thinking".

9 Jan 68

DS
DS

207

DUPLICATE

Nov 27 18 09

MVV PCB095V SCB057NFA009 UU

RR RCCWC

ZFD

O.P.I.

DO PRS

NRC

VV NFA008 UU

RR RCCWC RCCPGJ

DE RCCSNF 8 27/1602Z

R 271300Z NOV 67

FM CANDEFRAD FALCONBRIDGE

TO RCCWC/CANFORCEHED OPS

I FO RCCPGJ/RVAL ASTRONMICAL SOCIETY OF CANADA, COLLEGE ST.,
TORONTO 2E, ONT

RCCWC/METEOR CENTRE, NATIONAL RESEARCH COUNCIL, OTTAWA 2 ONT

BT

UNCLAS CES568

(A) 262200Z

(B) CLEAR

(C) NEW SUDBURY AT RESIDENCE

(D) TWO OBJECTS FLASHING

(E) BRIGHT

(F) GREEN

(G) SMALL DOTS

(H) 45 MINUTES

(J) TO FAR AWAY

(K) NORTH WEST OF OBSERVER MOVING SOUTH EAST

KL) NIL

(M) GUY DESJARDIN 1530 KINGSZYT. PHONE 566-3181

BT

*No further action req'd. - file
UTK*

NOV 27 18 18 '67
OPERATIONS CENTRE

208

PRIORITY

VV AVC055 UU

Nov 27 19 20 '67

FP RCCWC

DE RCCBC 44 27/1911Z

P 271620Z NOV 67

FM CANAMMDEP ANGUS

TO CANFORCED

BT

UNCLAS AS1

FOR CFOC UFO REPORT

SUBJECT: REPORT OF UNIDENTIFIED FLYING OBJECTS

A. 27 0835Z NOV 67

B. OVERCAST CMM CLOUDY CMM SLIGHT SNOWFLURRIES

C. 101967 ACEN SAYN FJ MP811

D. 13X DETACHMENT ANGUS ONT

E. CORPS OF COMMISSIONAIRE ROSS JONES

F. SPHERICAL IN SHAPE CMM ENLARGING AND CONTRACTING CMM AT SAME
TIME CHANGING IN LIMINOUS COLOURS FROM WHITE TO RED TO GREEN PD
NO SET PATTERN BUT RED COLOUR PREDOMINATING PD ONE UFO ONLY
OBSERVED PD DISTANCE AND ALTITUDE NOT ESTIMABLE PD APPEARED ABOUT

3 FEET ABOVE TREE TOP LEVEL PD OBJECT MOVED FROM 1200 OCLOCK

POSITION TO 3.00 OCLOCK POSITION IN RELATION TO OBSERVERS

POSITION PD NO SLIPSTREAM OR TRAIL FOLLOWED ITS POSITION

G. APPROX 10 MIN

PAGE 2 RCCBC 44 UNCLAS

H. SKY BRILLIANT IN NORTH EASTERLY POSITION FROM OBSERVERS PD

SKY BECAME VERY DARK AND OVERCAST AS OBJECT DISAPPEARED

BT

*No further action reqd.
letter of thanks only
27 Nov*

O.P.I.

D Gps

NOV 27 19 27 '67
CFOC OPERATIONS CENTRE

132
209

PP
V/2000-4 (D Ops)

Canadian Forces Headquarters
Ottawa 4, Ontario

November, 1967

101967 ACFM Sayn FJ
13X Detachment
Angus, Ontario

Dear Sir:

Your sighting report of an Unidentified Flying Object has been passed to this office for evaluation.

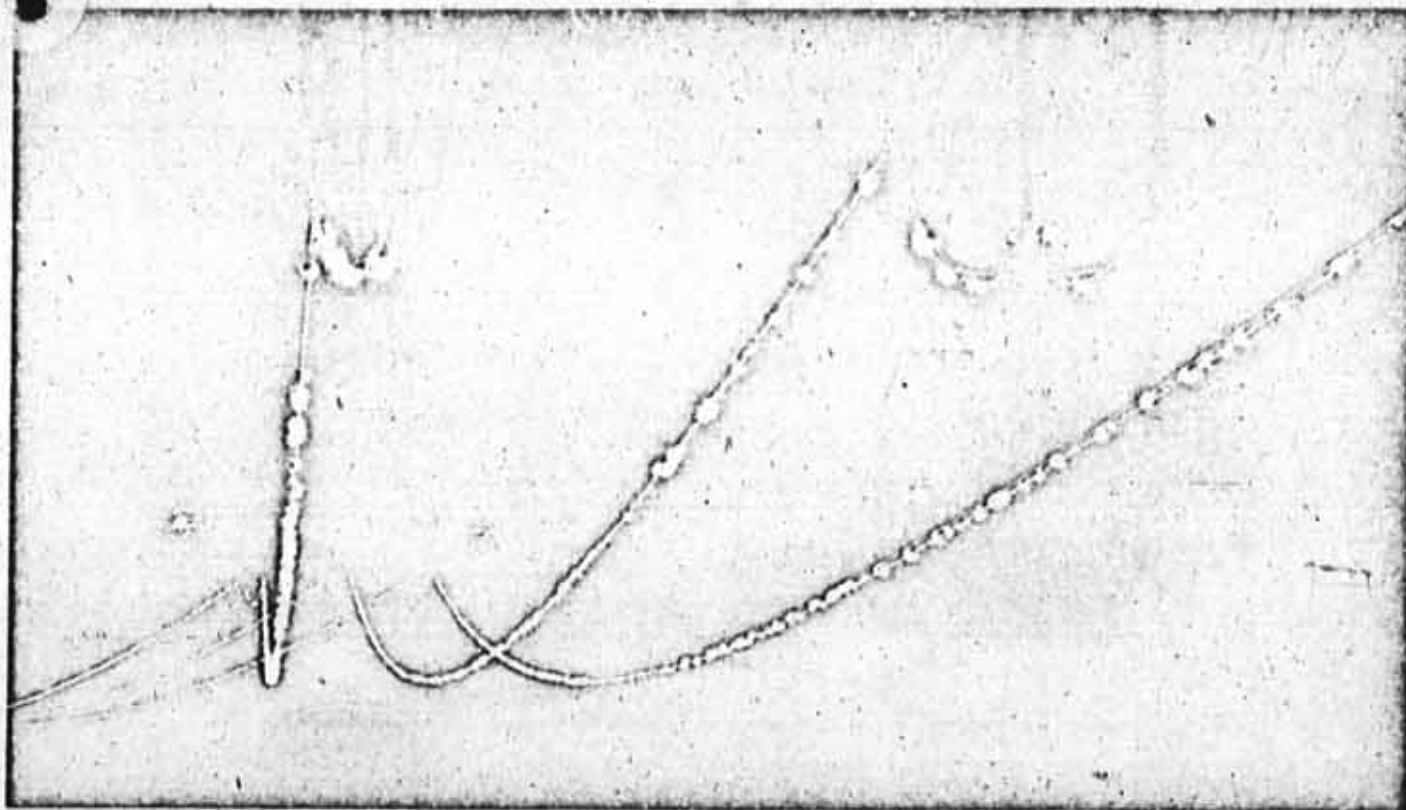
Your interest in reporting this matter is appreciated, and if further information is required, an officer of the Canadian Forces will be in touch with you. Thank you for your co-operation.

Yours truly,

W. W. Turner
W. W. Turner
Colonel
for Chief of the Defence Staff

W/C DF Robertson/2-5427/lv
Ops 4
Circ
File

209



Spectacular corona display along General Electric's experimental 500,000-v. transmission line near Pittsfield was produced by application of more than 120% of rated voltage. Corona also is induced by dirt, salt crystals or other foreign particles on the line or insulators. An extremely high voltage gradient can develop across these, exceeding breakdown voltage of air.

Plasma Theory May Explain Many UFOs

By Philip J. Klass

Washington—Luminous plasmas of ionized air, a special form of "ball lightning" generated by electric corona that occurs on high-tension power lines under certain conditions, may explain many sightings of lower-altitude "unidentified flying objects." It is related to St. Elmo's fire, sometimes seen on or near aircraft in flight.

If this theory is correct, it would explain the increasing frequency of UFO sightings in recent years when there have been growing numbers of very high-voltage power lines. Also there has been increasing atmospheric pollution whose contaminants may play a catalytic role in the phenomenon.

Descriptions contained in a recent book, "Incident At Exeter," appear to support this theory. John G. Fuller, its journalist author, interviewed dozens of persons who reported seeing UFOs in the vicinity of Exeter, N. H., approximately a year ago.

Fuller expresses the belief that top Air Force and government officials know that the UFOs are extra-terrestrial spacecraft but have successfully kept this a secret for nearly two decades to prevent national panic. But a much more plausible scientific explanation emerges when the Exeter sightings are analyzed.

Most of the UFO sightings in the Exeter area occurred along or very near to high-tension power lines, according to the author. The same is true of two other sightings he investigated in western Pennsylvania and others reported at the time of the Northeast power black-

out last November. Fuller speculates that the extra-terrestrial spacecraft may be attracted to the power lines as a source of energy for refueling their propulsion systems.

Electric corona, which this writer believes is the mechanism that triggers one form of "ball lightning" under suitable conditions, is a moderately well understood phenomenon. But most scientific investigations of corona have been aimed at devising means of suppressing it, rather than gaining fundamental theoretical understanding.

Ball lightning, most frequently reported during or immediately following a thunderstorm, is poorly understood. Until recent years it attracted little scientific attention, having been treated by many as an "old wives tale." But in the late forties and early fifties, ball lightning attracted the attention of several

top Soviet scientists, including Academician Peter Kapitsa.

Five years ago, several U. S. laboratories began to investigate the phenomenon, motivated in part by its possible application to anti-ICBM defenses (AWAST Dec. 4, 1961, p. 52). These included the Bendix Research Laboratories, the Illinois Institute of Technology's Research Institute and Raytheon's advanced development group.

There is a striking similarity between the reported characteristics of ball lightning and the UFOs sighted by dozens of persons in the Exeter area, as reported by Fuller, who used a tape recorder to insure accurate observation details. For example:

■ **Color:** Ball lightning is multi-colored, but red is the most predominant color reported, followed by intense bluish-white and green. A vast majority of the sightings reported from Exeter said the object was red, while the remainder were either bluish-white, green, or a combination of all of these.

■ **Shape:** Ball lightning normally is either spherical or ellipsoidal with many reports of a doughnut-shaped or ring configuration. The Exeter sightings were mostly round, oval-shaped or dome-shaped.

■ **Sound:** Ball lightning is often ac-



Ionized plasma's produced by electric discharge in laboratories of Illinois Institute of Technology's Research Institute several years ago show some of the characteristic shapes of UFO sightings. However, these pictures were made with extremely short film exposure times of 0.2-0.5 microsec., far briefer than the Lucci photo (below).

accompanied by a sizzling or hissing sound. Exeter sightings reported that the UFO sometimes made a soft humming or hissing sound.

■ **Dynamics:** Ball lightning has been reported as hanging motionless at times, yet able to move up, down and horizontally at extremely high speeds. It appears to move by rolling and gliding, often along electrical conductors or structures and frequently exhibits a spinning motion. The Exeter sighting reports said the objects often hovered over a fixed location, frequently power lines, often rolled or bounced along, sometimes exhibiting a spinning motion and would then appear to zoom off at great speed and disappear from sight.

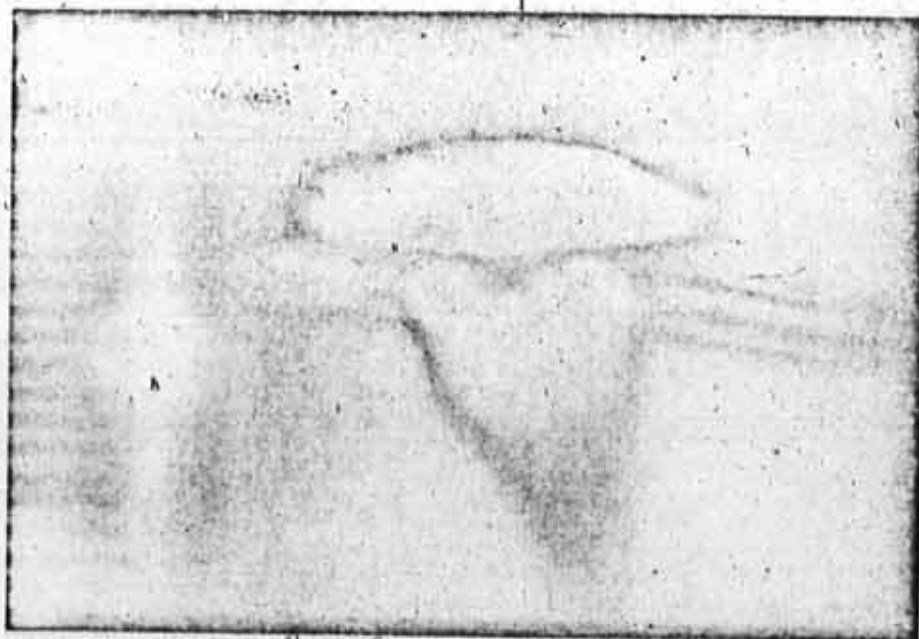
■ **Lifetime:** Ball lightning reports indicate that they can have a lifetime ranging from several seconds to many minutes. Observers at Exeter reported that objects remained in view for a few seconds or as long as 15 min.

■ **Size:** Ball lightning has been reported in sizes up to 15 ft. in diameter. Exeter observers estimated the size of objects sighted at from the size of a basketball to as much as 200 ft. in diameter.

This apparent size discrepancy is explainable in several ways. All but two of the sightings reported at Exeter by Fuller were made at night and one of the two occurred at dusk. The absence of visible landmarks for size comparison would make it difficult for a layman to estimate size accurately, especially when the object could induce fright in the observer.

Additionally, the type of ball lightning triggered by electric corona may be a lower-energy plasma of larger size than that usually induced by lightning discharges.

Electric corona is a luminous plasma caused by ionization of the air surrounding a transmission line or one of its insulators. When electric corona first occurs, it briefly resembles a small stroke of lightning. The corona can remain fixed or can travel along the



Unidentified flying object photographed over high-tension power lines near Beaver, Pa., in August, 1965, by James Lucci with full moon visible to the left of UFO, is believed to be a form of ball lightning induced by electric corona discharge. Photo was taken using film with ASA speed of 100, lens opening of f/3.5, set at infinity, and exposed for 6 sec. Film development time was 12 min.

power line until cooled and extinguished by external forces.

So long as a transmission line and its insulators are clean and suitably designed, corona does not normally occur. But if small particles of dust or salt crystals, for example, become affixed to the line or insulators they can trigger the corona, according to Darrell Shankle, manager of field research in Westinghouse Electric's electric utility operations. The reason is that an extremely high-voltage gradient develops across the dust or salt crystal which exceeds the breakdown voltage of air.

Even flying insects that alight on the line can trigger a corona. For example, during the months of August and September a very high-voltage transmission line in West Virginia experiences frequent coronas caused by "flying spiders" that are carried by the winds and alight on the lines, according to Shankle.

Transmission lines near the ocean are also susceptible to corona because salt crystals deposit on the lines and insulators, according to A. F. Rohlf, manager of high voltage development for General Electric at Pittsfield, Mass.

Exeter is located only 10 mi. from the ocean. The power lines of the Exeter and Hampton Electric Co., which were involved in the sightings, run right down to the ocean beach beyond Hampton. The company's chief engineer, Stanley Sawyer, says that corona occurs more frequently "when there is not much rain to clean off the lines."

A check with the U.S. Weather Bureau shows that conditions during the summer of 1965 preceding the Exeter sightings in September were especially conducive to corona in that area because it was an extremely dry summer.

For example, during the months of

July, August and September the Exeter area received barely more than half of normal rainfall. During these three months, there was only 6.0 in. of rain, compared to the average of 10.8 in.

When corona first occurs, it usually has a bluish color which can then take on the color of a lightning strike, according to experts on the subject. But the presence of sodium-chloride (salt) on the line could give it a pronounced orangish-red color from the sodium with a touch of green due to the chlorine.

This suggests that some of the Exeter sightings could have been no more than a corona discharge traveling along the power line. Here are some of the first-hand observations described by Fuller in his book:

■ Meredith Bolduc: "This thing was coming up the power lines toward the road . . ."

■ Mrs. Jerline Jalbert: "We see it regularly along here. Always seems to be somewhere near the power lines."

■ Mr. Heselton: "Just the other night, some other people saw it along another section of the power lines."

■ Mr. A. Reid Bunker, Sr. "We were under the high-power lines . . . when at 10:45 p.m. we saw an object approach . . . It had red lights most, and sort of green and white lights . . ."

First Sighting

The first Exeter sighting on Sept. 3, 1965, that triggered many subsequent reports, made by a teenager and subsequently witnessed by two policemen, was located near the 34,500-v. transmission line of the Exeter and Hampton Electric Co. The line is mounted on wooden poles approximately 29 ft. above the ground. In total there were 73 instances, Fuller writes, where persons reporting UFO sightings near Exeter used the words "power lines" or "transmission lines" or referred to locations near power lines.

During the period in which Fuller was researching the Exeter incident, he visited Beaver, Pa., near Pittsburgh, to check UFO reports. One night sighting during the previous month near high-tension power lines had been made by 17-year-old James Lucci and two friends and Lucci had managed to photograph the object (see photo, p. 49).

When Fuller and Lucci visited the area of the sighting and he was asked to pinpoint its location, the youth responded: "I'd say it was right up there, directly over the wires, not more than fifty or sixty feet."

A sighting was made three days later in the same general area by Donald de Turka from his yard. His house, Fuller reports, was "down the street from a section of high-voltage transmission line."

The Northeast power blackout pro-

UFO-Ball Lightning Observations Compared

CHARACTERISTICS	EXETER UFOs	BALL LIGHTNING
Color	Usually reddish-orange and/or bluish-white, sometimes green.	Multi-colored, with red dominating or bluish-white.
Shape	Round, oval or dome-shaped	Spherical, ellipsoidal or doughnut-shaped.
Movement	Often hovering or moving up/down slowly. Also moves horizontally at slow or high speed.	Sometimes hangs motionless or moves vertically and horizontally at slow or high speed.
Dynamics	Often seems to move with rocking or undulating motion. Sometimes appears to be spinning.	Appears to bounce or roll in horizontal direction. Sometimes exhibits spinning motion.
Sound	No sound, or slight humming or hissing.	Sometimes exhibits a sizzling or hissing sound.
Lifetime	From several minutes to up to half an hour.	From few seconds to many minutes.
Size	Difficult to estimate by most observers during night sightings, but those given range from basketball size to 200 ft. in diameter.	Daytime sightings (in brighter ambient light) usually are a few inches in diameter but have ranged up to 15 ft.

vided an unexpected opportunity for additional evidence that indicates a relationship between electric transmission lines, and associated power distribution apparatus, and the type of object sighted near Exeter and Pittsburgh.

A private pilot, Weldon Ross, was approaching Hancock Field at Syracuse, N.Y., for a landing "at almost the exact moment of the blackout. As he looked below him, just over the [345,000 v.] power lines near the Clay, N.Y., substation, a huge red ball of brilliant intensity appeared."

This particular substation initially was reported to be the "crux of the difficulty," Fuller writes.

Same Report

A total of five persons reported the same phenomenon, including Robert C. Walsh, deputy commissioner for the Federal Aviation Agency in the Syracuse area, according to Fuller.

On Nov. 26, Fuller reports that a power failure in St. Paul, Minn., coincided "with the appearance of objects overhead giving off blue and white flashes . . . Fifteen minutes later a resident on Hogt Avenue reported a 'blue-glowing' UFO as all house lights and appliances in the area went dead."

Fuller hints at foul play by extra-terrestrial spacecraft by claiming that scientists have not been able to explain the causes of the Northeast power blackout or the simultaneous proximity of the UFO sightings.

Engineers working with large-area power distribution networks concede

that the complexity of such systems makes it difficult to pinpoint readily a specific faulty circuit breaker. But no competent expert has publicly advanced the idea that the blackout resulted from external causes.

Voltage Surges

During conditions of such power network instabilities, there are voltage surges at some points in the network. These higher-than-normal voltage conditions would induce very large corona discharges.

The leakage current during corona contains harmonics in larger than usual proportions, creating an inductive effect which aggravates network instability. But only to this extent could the corona or corona-induced ball lightning have contributed to the blackout problem, according to several experts.

The marked resemblance between many of the Exeter sightings and reported observations of ball lightning appears significant, as well as their frequent appearance on, along or near high-tension power lines under atmospheric conditions likely to produce corona discharges along the lines.

The only unresolved question is the mechanism by which the corona discharge expands into a larger plasma with ball lightning characteristics. Present limited knowledge of both phenomena complicates this problem. But the similarity of electric corona discharge and natural lightning discharge which is known to induce ball lightning

would seem to support strongly the theory presented here.

Despite long years of experience with corona, the experts disagree even over the effect of temperature, barometric pressure and humidity in inducing corona. The reason is that power line corona is difficult to duplicate realistically for study under controlled conditions. To do so would require construction of a huge facility, large enough to house a long transmission line within a chamber so that barometric pressure and temperature could be varied while a variety of atmospheric contaminants were introduced.

There is considerably less scientific information available on ball lightning, although a number of conflicting theories have been advanced to explain it. Several years ago Dr. J. Rand McNally, Jr. of the Atomic Energy Commission's Oak Ridge National Laboratories made an informal survey of 1,962 persons in the laboratory. Surprisingly, he found that 110 of them, or 5.6% of the total sample, had observed ball lightning at some time. Usually it was associated with a conventional stroke of lightning, but not always.

Analyzing the returns, McNally concluded that ball lightning can originate randomly in space but is most often seen in proximity to wires or structures. It is usually airborne or partially airborne, moving randomly in space or along electric conductors. It often exhibits rolling, tumbling or spinning motions.

Small-diameter ball lightning has been reported inside houses and other buildings. Recently an Air Force Strategic Air Command flight crew reported seeing it inside an aircraft during flight. AVIATION WEEK & SPACE TECHNOLOGY was told by a scientist working in the field.

Many of the ball lightning sightings reported by persons surveyed by McNally occurred on or near power lines.

Many different theories and mathematical models have been advanced by scientists here and abroad to explain the basic mechanism which generates ball lightning and the internal-external forces that enable it to survive for extended periods.

Within recent months two Westinghouse Electric research laboratory scientists, Dr. Martin A. Uman and Dr. C. W. Helstrom published a mathematical model that predicts many of the unusual properties of ball lightning. The Westinghouse research was partially funded by the Office of Naval Research.

This theory suggests that ball lightning is a luminous, high-temperature region of air having high electrical conductivity that has been heated to the required temperature by a stroke of

lightning under suitable conditions. When cloud-to-ground lightning currents are symmetrical through the ball, it hangs stationary in air, but if these currents become unsymmetrical, the ball will move.

The lightning ball will disappear quietly if the internal electric currents gradually fade away, according to the Westinghouse scientists' theory, but it can also collapse with a bang if the current drops sharply.

One scientist who has worked in the field for some time, Carsten M. Haaland, says that none of the proposed models fully explains the phenomenon and that it is possible to find flaws in all theories proposed so far. Haaland, currently employed by AEC's Oak Ridge National Laboratory, previously conducted experiments in ball lightning when he was a member of the Illinois Institute of Technology's Research Institute.

Using relatively crude discharges in air produced by exploding wires, Haaland was able to create small ball lightning for brief intervals (see p. 49).

Haaland believes that there are at least two different types of ball lightning, perhaps more, which would explain why none of the theories advanced to date explains all sightings.

Most theories on ball lightning hold that some external source of energy is needed to sustain the plasma for more than a few seconds. Haaland pointed out, in support of the proposed new theory, that the electromagnetic lines of force from high-tension lines extend for a considerable distance and could supply such energy. The Exeter lines are at a relatively low height (29 ft.) above the ground.

Another scientist working in the field, who declined to be quoted by name, was asked if he could positively exclude the possibility that power line corona could generate ball lightning. He replied: "I wouldn't reject this possibility, because a conventional smoke-ring is an interesting example of a plasma held together under the proper conditions by a combination of internal and external forces which are difficult to explain scientifically."

This seems an appropriate analogy because not every instance of corona along power lines generates ball lightning. The presence of salt vapor near Exeter would increase the conductivity of the air, and vaporization of the salt crystals deposited during the dry summer could provide a mechanism for increasing current flow and air temperature once corona occurred. Other contaminants in the air at Exeter and at other locations could provide similar catalytic action.

A spokesman for the National Investigations Committee on Aerial Phenomena (NICAP), quoted by Fuller,

says that UFO "sightings seem to concentrate in small geographic areas during any wave. But the concentration area will shift around." This indicates that when the required combination of atmospheric conditions exists, the phenomenon occurs repeatedly.

It seems more than coincidence that only one of the dozens of Exeter UFO sightings reported by Fuller occurred in broad daylight. This prompted one police officer who was interviewed by Fuller to ask: "Where does it go in the daytime?"

It is possible that the necessary atmospheric conditions, including air contaminants, do not occur until the cooler night air arrives. Another possible explanation is that the luminous plasma of ionized air usually is too faint to be easily visible in daylight, although it could appear quite bright in the dark.

In the photograph taken by Lucci near Pittsburgh, using a 6-sec. exposure, the UFO appears to have about the same brightness as the full moon alongside it.

Westinghouse's Dr. Martin Uman suggests several possible tests which can be made in the presence of a UFO sighting to confirm or deny the ball lightning theory. If it is an electrical discharge, it should generate radio noise. At least several persons interviewed by Fuller reported that their automobile radios had briefly become inoperative when the object came near.

If the object is viewed through an inexpensive prism or transmission grating it should be possible to ascertain whether the object is a solid spacecraft or a form of ball lightning. Dr. Uman points out: If the object is a solid, the viewer will see a continuous spectrum, but if it is a form of ball lightning he will see instead a number of individual color lines, including intense red radiation due to the presence of hydrogen and blue due to nitrogen in the air.

Increasing knowledge of plasmas, their generation and containment has been gained from recent AEC programs to develop fusion power. If the efforts of a few competent plasma scientists can be directed toward ball lightning and its possible relationship to electric corona, it may be possible to explain at least some, if not many, of the UFO sightings.

If power line corona and air contaminants do play a key role in generating ball lightning, it could explain the increasing frequency of UFO sightings in recent years. During this period there has been increasing pollution of the atmosphere and expanding numbers of power lines operating at ever higher voltages which increase the likelihood of corona.

V 2000-4, (D Ops)

Canadian Forces Headquarters
Ottawa 4, Ontario

30 November, 1967

Commissioner
Royal Canadian Mounted Police
Ottawa 7, Ontario

Your File HQ-400-Q-5 Vol. 2

1. Receipt of the information forwarded under your cover November 24, 1967, concerning unidentified flying objects reported in the Vidora District, Sask. area is acknowledged.
2. This information will be evaluated and incorporated into our master sighting file. You will be informed of any further action taken by Canadian Forces Headquarters in this matter.

W. W. Turner
W. W. Turner
Colonel
for Chief of the Defence Staff

W/C DF Robertson/2-5427/lv
Ops 4
Circ
File

212

MEMORANDUM

ANNEX "H"

CLASSIFICATION

TO
A Dr. A.K. DasGupta
Head
Safety Assessment and Control Section

YOUR FILE No.
Votre dossier

OUR FILE No.
Notre dossier 1107-4-6

FROM
De Mr. S.E. Hunt

DATE September 13, 1967

SUBJECT
Sujet Determination of possible radiation hazards to the general public from the
alleged landing site of an unidentified Flying Object near Falcon Lake, Manitoba

Introduction

On the 24 July 67 the Physics Section of this Division monitored on behalf of the R.C.M.P. Crime Detection Laboratory, Ottawa, samples of soil, burnt shirt and steel tape for possible radioactive contamination. A gamma-ray spectral analysis of the three samples revealed activity levels of up to approximately 0.5 μCi of Ra^{226} or its equivalent. The samples had been collected from the alleged landing site of a U.F.O. near Falcon Lake, Manitoba. The information received by this Division on the 24 and 25 July 67 supporting this particular sighting and samples were vague and disjointed. Further light was shed on the matter when the undersigned had an opportunity to review the investigation report of the U.F.O. sighting submitted by S/L P. Bissky, (R.C.A.F.) to the Chief of Defence Staff, Ottawa. A copy of this report was made available through the courtesy of Inspector Hendrick during a visit to the R.C.M.P. Crime Detection Laboratory, Ottawa. Appendix A to this memorandum is a duplicate copy of S/L Bissky's report.

The task of assessing the radiation hazard to the general public from the landing site did not initially indicate that it would be necessary for this Division to involve itself in the R.C.M.P. and D.N.D. investigation. However, it soon became obvious to the undersigned that collection and co-ordination of all background information was essential due to the following:

- (a) The apparent lack of cooperation by the principals toward the military and police.
- (b) The exact location of the sighting had not been established at the time of the Division's initial involvement.

The undersigned flew to Winnipeg on the 26 July 1967 where he was met by Mr. D. Thompson of the Manitoba Health Department. Mr. Thompson advised the undersigned that a meeting had been arranged between representatives of the R.C.M.P. and D.N.D. and the Federal and Provincial Health representatives. This meeting was to establish what would be the best way to proceed.

... 2

Field Investigation Report

26 July 1967, 1330 hrs. - R.C.M.P. Headquarters Winnipeg
- Met with Superintendent Shark, R.C.M.P., S/L Bissky, R.C.A.F., Cpl. Davis, R.C.M.P., and Messrs J. Rendall and D. Thompson of the Manitoba Department of Health. A briefing of what had happened to date was given by S/L Bissky. This briefing was a very brief review of the investigation report compiled by S/L Bissky. A discussion followed the briefing as to what was the best way to proceed. The following actions were decided upon.

1. Messrs Thompson and Hunt to visit Mr. Earl Campbell of the Manitoba Cancer Clinic to ascertain the exact location of the Radium burial ground at East Braintree.
2. Messrs Thompson and Hunt to visit Inland Cement Company to find out if the company has any Ra²²⁶ sources.
3. S/L Bissky, Cpl. Davis, Messrs Thompson and Hunt to visit Mr. Stephan Michalak at his residence around 1900 hrs. 26 Jul. 67.

26 July 1967, 1430 hrs. - Messrs Thompson and Hunt met with Mr. E. Campbell of the Manitoba Cancer Clinic. Mr. Campbell showed photographs of the site and gave us the name of a Mr. R. Kemp who could guide us to the site. During his visit we checked, for radioactivity, some samples of soil and vegetation collected from a Beausejour U.F.O. sighting. The samples were checked on a scintillation counter. There was no evidence of any radioactivity.

26 July 1967, 1800 hrs. - S/L Bissky, Cpl. Davis and Messrs Thompson and Hunt visit the residence of Mr. S. Michalak located 314 Lindsay Street. An attempt was made to persuade Michalak to take us to the site of the U.F.O. landing, however, at the end of the visit it still appeared unlikely that he would go as he felt that he would lose too much money by missing a days work. Mr. Michalak showed the undersigned samples of rock, soils and vegetation collected from the U.F.O. site. These samples were located in his basement. A survey of his basement showed no evidence of any loose contamination. Radiation fields were detected coming from the plastic bags containing soil and the remnants of Michalak's burnt shirt. Michalak was at first unwilling to part with the samples, but eventually allowed the undersigned to have part of the samples from each bag for further analysis. Mr. Michalak has no respect for contaminated materials. He handled the contaminated soil with his bare hands, and was made to wash his hands with great difficulty. During our conversation with Michalak he produced a series of photographs taken by Life Magazine representatives. These included photos of the site and colour photos of the burns on his abdomen and the scorched grid pattern on his undershirt. At the time of this interview, Michalak's wife and eldest son were present.

27 July 1967, 1000 hrs. - Messrs Thompson and Hunt visited the Radium burial site at East Braintree (see Appendix B). We were guided by Mr. R. Kemp, Conservation Officer for the Renewable Resources Branch, Department of Mines and Natural Resources for Manitoba. Only one of the steel spikes used

Page Three

to mark the burial site could be located. However, the area was easily recognizable from the photographs shown to us by Mr. E. Campbell (Manitoba Cancer Clinic). It appeared to us that the soils had not been disturbed as most of the area was covered with vegetation. Another two years will see the area completely overgrown with vegetation. No radiation checks were made as there was a minimum of three feet of sand covering the contaminated materials. The maximum amount of radium located at the burial site is in the area of 12 mgms.

27 July 1967, 1200 hrs. - Met S/L Bissky, F/O Smith, Cpls. Shepard and Reed, all of the R.C.A.F., Cpl. Davis and Constable Zacharias of the R.C.M.P., and Mr. Michalak at the Falcon Lake Provincial Park entrance. After lunch, the above mentioned plus Thompson and Hunt set out for the U.F.O. landing site. This involved crossing to the north side of Hwy. No. 1 and following the route as indicated on the attached map. The entire expedition took about 45 minutes to reach its destination. The site was confirmed as being the correct site by Constable Zacharias who had been taken to it by Mr. B. Thompson of the Winnipeg Airborne Phenomena Research Organization the night before. The landing area of the U.F.O. was recognizable from the photographs taken by Life Magazine, the origin of the circular outline of vegetation in the writer's opinion is debateable. A thorough survey of the landing area was carried out, using a Tracerlab SULL, Admiral Radiac 5016, and a Civil Defence CDV 700 survey meter. One small area was found to be contaminated. This was located across the crown of the rock. There was a smear of contamination about 0.5 x 8.0 inches on one side of the crack. There was also some lichen and ground vegetation contaminated just beyond the smear. The whole contaminated area was no larger than 100 square inches. All water run off areas were checked for possible contamination, but nothing was found. Samples of the contaminated rock and lichen were taken for further analysis. Photographs of the area were taken by Cpls. Shepard and Davis and Mr. Thompson. Since there was no serious health hazard involved due to the remoteness of the area and also due to the fact that the majority of the contamination was taken for samples, no further precautions were felt necessary at the U.F.O. site. Prior to returning to Winnipeg, it was decided that Messrs Hunt and Thompson would try and establish the source of the radioactivity by paying a visit to Mr. B. Thompson.

1 August 1967, 0900 hrs. - Samples from U.F.O. site and those taken from Michalak's residence were checked under a U.V. light in the Environmental Sanitation Laboratory in the Norquay Building. The samples taken from the U.F.O. site gave an indication that they were contaminated with Radium luminous paint. The samples from Michalak's house did not respond to the U.V. light. These samples were then packaged and sent to R.P.D. Ottawa for further analysis.

1 August 1967, 1330 hrs. - A visit was made to Inland Cement Company where Mr. S. Michalak is employed as an Industrial Mechanic. The purpose of the visit was two fold. Primarily we wanted to find out if the Company had used any radium sources in gauges and secondly to inspect the Company's Ohmart gauges using Cs¹³⁷. The latter will be dealt with in a separate report. Conversation with Mr. R. West revealed that the Company had never used radium sources either in Winnipeg or Regina, where both he and Michalak had worked prior to moving to Winnipeg.

. . . 4

2 August, 1967, 1400 hrs. - Visited Mr. B. Thompson at his residence at Oakdean Gardens, Suite 312, 66 Morrow Avenue. He advised us that he had no samples in his suite, but had some at his mother's place at 28 Frederick St., St. Vital. A series of rock and vegetation samples were checked, but showed no activity. Thompson then produced a soil sample that he had obtained from the Falcon Lake U.F.O. site. This sample proved to be radioactive. Levels up to 1 mR/hr were detected. Thompson was most reluctant to part with the sample so it was left with him. The sample was sealed in a plastic bag. A contamination check was made of the area where the samples were, using the U.V. light. The area was extremely cluttered with photographic equipment and a great deal of junk. Several areas responded to the U.V. light, but these did not prove to be areas of contamination, probably photographic emulsion splashes. Thompson appears to be a very sloppy worker.

During our conversation with Mr. Thompson it was established that he worked as a sales representative for a local outdoor advertising firm (Maxlab Products Ltd.). His involvement with APRO was a spare time hobby. He stated that the Winnipeg chapter had approximately fifteen members, four of whom were investigating members. To be an investigating member, it is necessary to be 21 years or over. He stated that the remainder of the organization was made up of teenagers. The APRO organization appears to be a very loose knit organization. Thompson was unable to tell us the names of the other investigating officers. Prior to leaving Thompson, he advised us that he had taken some samples to the Nuclear Medicine Department of the Winnipeg General Hospital. He was unwilling to tell us who had checked the samples as he said the technician had carried out a spectral analysis without his superior's authority. He said that one sample showed a 1.4 mev peak. Two other very weak energy peaks were also detected. Thompson did not know where the samples were presently located. These samples had been given to Thompson by Michalak.

3 August, 1967, 1000 hrs. - A visit was paid to Hart Electronics, 196 1/2 Osborne Street. This visit was arranged at the request of S/L Bissky who had received a similar request from Mr. Hart. A contamination check of Mr. Hart's car and store showed no evidence of contamination. Mr. Hart was concerned as he had helped Michalak collect and carry home some of the samples from the U.F.O. site. Mr. Hart appears to be very interested in "Interstellar Vehicles". He has apparently seen several such vehicles. He even shot at one while duck hunting near Beausejour. Mr. Hart advised us that he was in the process of developing a device which can be used for detecting "Interstellar Vehicles". He did not have the circuitry available as he had loaned it to a friend.

3 August, 1967, 11.15 hrs. - Messrs Thompson and Hunt visited the Nuclear Medicine Department of the Winnipeg General Hospital. Technician, Mr. George Dyck, was contacted. He stated that he had checked the samples submitted by Thompson. His superiors knew about the samples being checked, and, in fact, they still had the samples as they were going to do a second analysis on them to try and determine the isotope by its rate of decay.

... 5

Page Five

Dr. F. Helmuth was introduced to us by Mr. Dyck. Dr. Helmuth had examined the burns that Michalak had received and he felt that they were thermal burns. He said that Michalak had been sent to Pinawa and put in the W.B.C. Although Dr. Helmuth had not seen the results, he understood that no ingested activity was found in Michalak. Dr. Petco at Pinawa had apparently contacted Dr. Helmuth and had suggested that Michalak receive psychiatric treatment. However, Dr. Helmuth didn't feel that this was necessary. Dr. R.J. Walton, Executive Director for the Manitoba Cancer Clinic, was asked by Dr. Helmuth to come over to meet us. Dr. Walton was pleased to let us have the samples as they weren't particularly interested in becoming involved in work of this nature. The only reason they checked these samples was that they had made the analysis before they realized what was going on. Thompson was checking the results of one analysis against the other. The samples will be returned to Ottawa with the undersigned.

7 August 1967, 0930 hrs. - A telephone call was made to the Manager of Plaxlab Products Limited. He advised the undersigned that they did not use any radium luminous or luminous paints for their products.

Conclusions

The undersigned does not intend to prove one way or the other whether a U.F.O. had been sighted as there are still too many unknowns. Secondly, in the opinion of the writer such ventures are outside the main interests of this Division.

There are however two conclusions that are of interest to this Division, they are as follows:

- (a) Radioactive contamination of rock and lichens was found at the alleged U.F.O. landing site. The origin of this contamination has yet to be determined.
- (b) The radiation levels measured were not high enough to create a radiation hazard to the general public.

SEH/lb

MEMORANDUM

Westwin, Man,
26 May 67

S/L P Biesky
330 AIROPS/TC

Re: Telephone Communication
Mr. Steve Mychalak

1. I have at your request contacted the physician who examined the above named, Saturday evening 20 May at Misericordia General Hospital Winnipeg, following Mr. Mychalak's reported exposure to an UFO.
2. At the time of examination the physician was unaware of the circumstances surrounding Mr. Mychalak's burns.
3. At examination the physician found an area of first degree burns over the upper abdomen, covering an area of 7-8 inches and consisting of several round and irregular shaped burns the size of a silver dollar or less. These were a dull red in color, the hair over the lower chest was singed as was the hair on the forehead with some questionable redness of the right cheek and temple.
4. Subsequently Mr. Mychalak complained of feeling ill and his clothes and blood were checked for radiation and found to be negative.
5. As of this date Mr. Mychalak is reported to be feeling better.
6. If anything further is discovered the physician has offered to call me.

300

(D J SCOTT) SgLCDR
Deputy Base Surgeon
342

ANNEX "G"

R.D. OATWAY, M.D.
F.R.C.S.(Ed.) F.R.C.S.(C)

September 19, 1967

Capt. E.P. Cardera
Deputy Base Surgeon
CFB Winnipeg
Westwin, Manitoba

Dear Capt. Cardera:-

Re: Stephen Michalak
31A Lindsay Street

Mr. Michalak suffered first degree burns to the upper abdominal wall on May 21, 1967 near Falcon Lake, Manitoba. He states it was due to a blast of hot compressed air from an U.F.O. which landed near him in the scrub bushes. He was treated at Misericordia Hospital and I saw him the next day. At that time he felt weak, rather nauseated, couldn't eat, had a band-like headache, and forehead felt moist. He appeared rather depressed, 'dazed', apathetic but was rational and coherent. The undershirt he had been wearing showed burn holes with charred or singed black edges. General examination was otherwise negative. The department of nuclear medicine (Winnipeg General Hospital) (Dr. Helmuth) checked his burn, clothing and blood for radioactivity; apparently none was found. Over the next few days he remained anorexic, nauseated and lost about 13 pounds in weight. Gradually his spirits and appetite improved and his burn faded. A complete blood count and sed. rate on May 24th and 30th were normal except for a sed. rate of 22 mm/hr (falling to 9) and lymphocytes 16% (rising to 21%). June 1st he developed a rash on the chest wall -- at first urticarial in nature. This settled in about 3 weeks. On Sept. 15th he came to my office with a generalized urticaria (erythema and wheals), weakness, dizziness, and some tightness in throat - of hair an hours duration. He was given adrenaline and sent to Misericordia Hospital for observation. The urticaria had almost subsided by that evening and he was sent home the next day. It was not felt this had anything to do with his initial burn. He will report if there are any further symptoms.

Sincerely,

Dr. R.D. Oatway

Note: The foregoing medical report is to be treated as confidential.

CFHQ

ANNEX "F"

A 1700Z 20 MAY 67
B CLOUDY SKY
C MR S MICHALAK, 14 LINDSAY ST WINNIPEG 9 MANITOBA. PHONE
489-3162
D FALCON LAKE MANITOBA. 4941N 9515W
E NIL
F TWO OBJECTS ON GROUND APPROX 35 TO 40 FEET IN DIAMETER, EIGHT
FEET HIGH, SAUCER SHAPED, COLOUR OF UNPOLISHED STEEL ON GROUND
AND CHANGING TO HEATED METAL COLOUR ON DEPARTURE
G EXCESS OF ONE HALF HOUR
H MR MICHALAK OBSERVED THE TWO UFOS FROM A SHORT DISTANCE FOR ONE
HALF HOUR AND OBSERVED ONE DEPART VERTICALLY THEN HEAD SOUTH.
HE WENT UP TO THE REMAINING ONE, OBSERVING AN OPEN DOOR WITH A
VIOLET LIGHT PREVENTING HIM FROM SEEING INSIDE. AS HE APPROACHED
HE COULD HEAR A WHIRRING SOUND AND INDISTINGUISHABLE VOICES
FROM WITHIN. UPON TOUCHING THE OBJECT WITH HIS GLOVED LEFT HAND
HIS GLOVE BURNED, THE DOOR CLOSED AND THE OBJECT STARTED ROTATING
COUNTER-CLOCKWISE THEN DEPARTED VERTICALLY ALSO HEADING SOUTH.
HIS SHIRT WAS BURNED FROM THE EXHAUST PANELS ON THE OUTER EDGE
AND HE REQUIRED MEDICAL TREATMENT FOR BURNS ON HIS STOMACH. HE
HAS LOST TWELVE POUNDS SINCE AS HE HAS BEEN UNABLE TO EAT.
WHILE HE WAS APPROACHING HE COULD SMELL WHAT HE RELATES TO AS AN
ELECTRICAL FIRE. THE NOISE INCREASED IN PITCH TO A HIGH WHINE ON
TAKE OFF

REPORTING OF FIREBALL AND METEORITE OBSERVATIONS

GENERAL

1. The National Research Council Associate Committee on Meteorites coordinates reports of sightings of falling meteors and periodically launches a publicity campaign to enlighten the Canadian public. All members of the Canadian Forces located in North America can assist this activity by reporting any such sightings.

DESCRIPTION

2. A fireball is a bright meteor with a luminosity which equals or exceeds that of the brightest planet. It is usually seen moving rapidly across the sky and sometimes a trail of glowing particles is left behind. The meteor may explode with a burst of light and a loud sound; this may happen several times during a single fall.

REPORTING

3. When a sufficient number of fireball observations are obtained over an area 100 miles or more, it becomes possible to combine the observations and predict the most probable area in which meteorites associated with the fireball may have reached the surface of the earth. Since freshly fallen meteorites are of considerably more interest than old falls, sightings should be reported as soon as possible.

4. Unclassified priority messages shall be addressed to CANFORCED with information copy to the addressee indicated in para 5. The first words in the text shall be "FOR CFAO, FIREBALL AND METEORITE OBSERVATIONS". All reports shall include as much of the following information as is relevant, using the identifying letter indicated:

- A Date and time of sighting (GMT shall be used).
- B Condition of sky (clear, cloudy, haze, etc.).
- C Location of observer (either precise position on ground or geographical reference).
- D Occurrence of bursts (number and approximate positions along path).
- E Luminosity (brightness compared to planets or moon and occurrence of shadows cast by nearby objects, if any).
- F Colour (distinguish between colour of fireball and any persistent train or trail after passage of fireball).
- G Form (size in relation to moon and shape).
- H Duration (both of fireball in motion and persistent train or trail in the sky).
- J Sounds (description of sound and time interval between sighting the fireball and hearing the sounds).
- K Position in sky (positions of beginning and end of fireball path, both azimuth and elevation).
- L Any other unusual observations.

AL 25/66

5. In addition to the report to Canadian Forces Headquarters an information copy shall be transmitted by routine precedence to the regional representative in the area of the sighting. The regional addresses are as follows:

Maritimes	Dr. R.F. Cormier St. Francis Xavier University Antigonish, N.S.
Quebec	Mr. Wm. A. Warren 30 52nd Avenue Lachine, P.Q.
Ontario	Royal Astronomical Society of Canada 252 College Street Toronto 2B, Ont. Meteor Centre National Research Council Ottawa 2, Ont.
Manitoba	Prof. E. Leith University of Manitoba Winnipeg, Man.
Saskatchewan	Mr. John V. Hodges 1554 Elphinstone Street Regina, Sask.
Alberta	Prof. R.E. Folinsbee University of Alberta Edmonton, Alta.
British Columbia	Dr. W.F. Slawson University of British Columbia Vancouver, B.C.

PUBLICATION

6. This order shall be reproduced yearly in unit orders. Commanding officers shall ensure that duty officers are provided with details of this order for ready reference to facilitate accurate reports after normal working hours.

(C)

S 1605-71-1
L 1605-00 (SCDCTS)

Issued 24 Jun 66 (Supersedes CFAO 71-1 issued 13 May 66)

Indexing

Fireballs

Meteorites

Reports & Returns

AL 25/66

Applicable to: Navy, Army, and Air Force

.6

REPORTING OF UNIDENTIFIED FLYING OBJECTS

GENERAL

1. Reports of unidentified flying objects (UFOs) are frequently received at Canadian Forces bases from various sources. CFHQ is responsible for processing any action required on these reports. Accordingly, UFO reports shall be transmitted to CFHQ in accordance with para 2.

REPORTING

2. Unclassified priority messages shall be addressed to CANFORGEHD and the first words in the text shall be "FOR CFOC: UFO REPORT". All reports shall include as much of the following information as is obtainable, using the identifying letter indicated:

- A Date and time of sighting (GMT).
- B Condition of sky (clear, cloudy, haze, etc).
- C Identification of observer.
- D Location of observer at time of sighting.
- E Identification of other persons also observing the UFO.
- F Description of sighting (shape, colour, altitude, movement, number of UFOs, etc).
- G Duration of observation.
- H Any other relevant information.

3. Fireball and meteorite observations shall be reported in accordance with with CFAO 71-1

(C)

S 1605-71-6
V 2000-4 (DOPS)

Issued 7 Oct 66

IndexingUnidentified Flying Objects
Reports & Returns

AL 40/66

ANNEX "C"

PRIORITY

FM CANFORCEHED

TO RCGRC/CANLIFTCOM

ROWTEV/CANFORBASE EDMONTON

BT

UNCLAS OPS 421

SUBJECT: UFO

REFERENCE: CANINFO EDMONTON MESSAGE PR 158 082346Z

1. FOLLOWING IS A REPEAT OF REF MESSAGE:

A. 8 AUG

B. N/A

C. MR K PATRICE, CAMROSE CANADIAN PHONE 672-4421

D. PASTURE AREA AT DUHAMEL AREA CAMROSE ALTA

E. NIL

F. FOUR RINGS IN GROUND AS THOUGH ROUND LARGE OBJECT SETTLED INTO GROUND. DEPRESSIONS HEAVIER TO ONE SIDE. RING DIAMETER OF 34 FT TO 36 FT NO SCORCH. CLEARLY MARKED TEETH OR CLAW LIKE MARKS AROUND EDGE

G. N/A

H. INFORMANT HAS OBTAINED PHOTOGRAPHS

2. MAY SUBJECT REPORT BE INVESTIGATED BY CFB NAMAO AND REPORT WITH COPIES OF PHOTOGRAPHS BE FORWARDED TO CFBHQ ATTEM DOPS FOR STUDY

BT

REPORT OF
INVESTIGATION OF CERTAIN MARKS
NEAR CAMROSE, ALBERTA

ANNEX "C"

Canadian Forces Base, Edmonton
16 Aug 67

BACKGROUND

1. The writer was detailed by HQ CFB, Edmonton, to carry out an investigation and report upon certain markings on the ground in the vicinity of CAMROSE, Alberta. Contact with Mr. PATRIDGE of the Camrose Canadian to obtain specific information and liaison with the DRB Experimental Station, SUFFIELD, was ordered. Arrangements were made by telephone for Suffield to provide a Scientific Officer and, at that Officer's request, a photographer from CFB Edmonton was also taken along. Personal contact was made with Dr. GH JONES of Suffield at the Camrose airstrip and the bulk of the investigation was made in his company.
2. Capt GC WALKER and the photographer proceeded to CAMROSE and vicinity by PMC, departing Nampa at 1000 hours, 11 Aug 67. After meeting Dr JONES, the party proceeded to the offices of the Camrose Canadian and met with Mr. PATRIDGE, from there all proceeded to the farm of a Mr. SCHIELKE near the village of DUHAMEL and examined the ground in question. After the departure of Dr JONES, Capt WALKER met a Mr. Ray SANDERS and as a result of information from him, proceeded back to DUHAMEL for a further visual investigation and then returned to NAMAQ.
3. On 15 Aug, Capt WALKER returned to DUHAMEL and obtained soil samples as directed in a telephone call from CFHQ Operations.

GENERAL DESCRIPTION OF GROUND

4. The field involved is the Southeast quarter of Section 28, Township 45, Range 21 and is owned by Mr. SCHIELKE. It is located approximately one mile South and two miles West of the village of DUHAMEL, near Alberta Highway 21. Approximately one and a half miles due North there are two large, white storage tanks. There are prominent grain elevators in the village. A sketch of the immediate quarter-section is attached as Annexure A.
5. There were a total of six circles or portions of circles in the quarter-section. These were arbitrarily numbered for ease of reference and the numbers shown on Annex A.

VERBAL INFORMATION

6. Mr. PATRIDGE was the first person contacted. He stated that he knew little first-hand information. He had been informed by Mr. Ray SANDERS of the existence of the marks and had taken photographs and written a short article for his newspaper.
7. Mr. Edgar SCHIELKE was interviewed. He stated that he had personally seen Mark #2 on the morning of Saturday, 5 August. It was of sufficient interest that he mentioned it to relatives and friends, with the end result that Mr. SANDERS became interested. Mr. SANDERS then found the other marks in the same field. Mr. SANDERS informed news media including Mr. PATRIDGE of the Camrose Canadian. Mr. SANDERS resides at SW 33, Township 45, Range 20, near Camrose. His telephone number is 672-6861.

93

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8. Mr. SANDERS took some photographs, these were examined but had nothing to contribute and were not retained. Mr. PATRIDGE's negatives were borrowed for printing by CFB Edmonton Photo Section.

9. Various other people were mentioned in the course of these conversations as having sighted Unidentified Flying Objects in the area. None of the sightings were made in the immediate vicinity (ie, within one or two miles) and there were no mentions of sightings later than the end of June. The SCHIELKE family themselves heard or saw nothing unusual, except the marks themselves.

10. There was a rainstorm of approximately one inch on Friday, 4 August and another fall of the same amount on Monday, 7 August.

DETAILED DESCRIPTION OF VISUAL EXAMINATION

11. All the marks exhibited the same general appearance. There is a ring, six inches in width, with diameter varying from slightly over 31 feet to 36 feet. These show no visible evidence of heat, but there is a definite impression in the ground indicating distinct pressure. There is no indication of disturbance inside the ring. There is no indication of any tracks to or from the marks. There are vehicle tracks in the field but these are quite distinct from the marks in question and bear no apparent relationship. Both Mr. PATRIDGE and Mr. SANDERS stated that most of the vehicle tracks have been made since they first saw the marks, obviously by sightseers.

12. The overall impression of the rings is the same as one would expect from a snow or mud tire with lugs spaced about three inches apart. At some points along the perimeter, the impression of "lugs" is quite distinct and at others, almost non-existent. There is slight evidence of movement in a radial manner along the marks in that certain marks have the grass pressed down in a definite direction. The direction is consistent within each mark but not the same between one mark and another.

13. Each mark has one portion of the circle or arc more heavily impressed at one side, but the side involved is not consistent from one mark to the other neither in relation to direction or to the height of ground. The ground has small irregularities and the grass is quite short but the marks are not more heavily impressed on the higher ground than they are on lower ground a few inches away. The impressions are definitely deeper and more distinct than tracks of cars or light trucks in the same field. The grass has been damaged, in most cases killed, but new growth is now taking place within the marks.

14. There are cattle in the field but it is not possible to say whether they have been avoiding the marks, the ground being such that no significant cattle tracks are being left. There is no evidence, physical or verbal, of any change in their habits.

15. There is no physical evidence of any damage to trees or shrubs in the field. There is no evidence that would lead to a conclusion of deliberate interference or involvement by any person. Careful scrutiny was made to determine if any centre point was marked. In one mark such a point was found with a stick pushed into the ground, but both Mr. SANDERS and Mr. PATRIDGE stated that the stick had been placed there by SANDERS himself during the process of measuring the marks. There is no evidence of chemical involvement. A survey was made by Dr. JONES with a geiger counter, but only

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normal background radiation readings were obtained. There was ~~no~~ radiation change inside, along or well outside the rings.

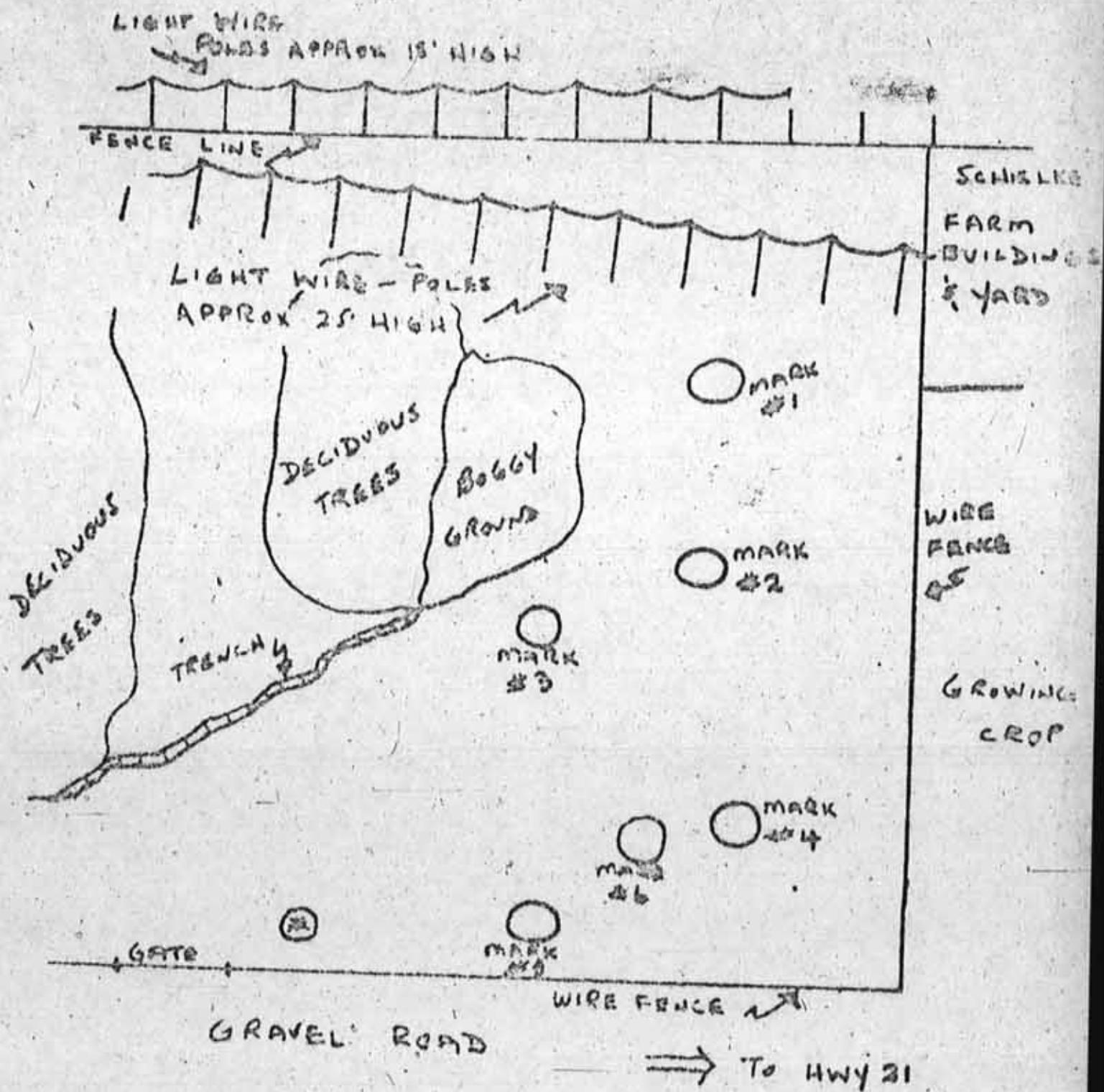
16. Mark #1 - A complete circle, very regular with definite "tread" markings. Grass appears to be pressed down in a clockwise direction. At the North side, there were a few very sharply defined marks across the ring approximately one inch apart.
17. Mark #2 and Mark #3 - Complete circles, #2 slightly irregular (ie, 34 feet North-South versus 36 feet East-West). Grass appears to be pressed down in a counter-clockwise direction. "Tread" markings evident in places.
18. Mark #4 - Slightly more than half of a circle evident. Grass appears to be pressed down in a counter-clockwise direction. "Tread" markings evident in places. Two small areas of sod removed by Mr. SANDERS and taken to Emergency Measures Organization in EDMONTON. (Mr. SANDERS stated these samples were examined at the University of Alberta. In view of samples taken by myself, it was not considered worthwhile to pursue this.)
19. Mark #5 and Mark #6 - Less than half of a circle evident. Markings less distinct than in the other marks. Unable to determine direction of collapse of the grass.
20. At the point marked with a star on Annex A, there was an indistinct arc on the ground, but it was impossible to determine whether this was, in fact, a mark similar to the others, or whether it was merely coincidental.
21. Particular attention was paid to surrounding fields from the car while travelling in the area. Some of these fields were freshly ploughed and others were in crop. There was no evidence of interference in any other fields.

GC Walker

(GC Walker) Captain
1 Transport Helicopter Platoon Detachment
CFB Edmonton

Attachments:

- Annex A - Sketch of field
- Annex B - Copy of CFHQ authorizing message
- Annex C - Photo, Mark #2, facing Northeast
- Annex D - Photo, Mark #3, facing Northwest
- Annex E - Photo, Mark #4, East side of mark
- Annex F - Photo, Mark #4, showing "tread" marking in coupling
- Annexes G1, G2, G3 - Photo, showing soil samples being extracted. (Shovel marks sample, box marks perimeter of mark, stake marks centre point.)
- Sample #1 - Soil sample 60 feet West of East fence and 60 feet East of Mark #2.
- Sample #2 - Soil sample North side of perimeter, Mark #2.
- Sample #3 - Soil sample, South of centre point at one half radius, Mark #2.
- Sample #4 - Soil sample, centre point of Mark #2.



NOT TO SCALE

93

ANNEX "D"

BT

UNCLAS RCC076

FOR CFOC. UFO REPORT

A 050210Z OCT 67

B NIGHT CLEAR, NO MOON

C CPL WERGICKY RCMP BARRINGTON PASSAGE

D OUTSIDE LOWER WOODS HARBOUR, N.S.

E 6 OTHER WITNESSES - NAMES KNOWN TO RCMP CPL

F DARK OBJECT - IN EXCESS OF 60 FT - 4 WHITE LIGHTS

HORIZONTALLY 15 FT SPACING - MOVEMENT EASTERLY LOW

ALTITUDE DOWN TO WATER SURFACE

G UNKNOWN BUT IN EXCESS OF FIVE MINUTES

H UFO DESCENDED RAPIDLY TO WATER WITH HIGH WHISTLING

SOUND. BRIGHT FLASH ON HITTING WATER. SINGLE LIGHT

FLOATING ON SURFACE REMAINED FOR LONG TIME SANK BEFORE

RCMP COULD GET BOAT TO IT. AREA SEARCHED EXTENSIVELY BY

CCC LIFEBOAT 101 AND MANY SMALL BOATS - NIL RESULTS.

POSITION OF LAST SIGHTING 4330.5N 6545W. ALL OTHER POSSIBLE LEADS

(A/C, FLARES, ETC.) CHECKED - NIL RESULTS. FOLLOW UP: AT

051215Z COAST GUARD CUTTER 101 PROCEEDING TO AREA WITH RCMP ON

BOARD TO RESEARCH AREA BASED ON A/REF DATUM POINT.

ANNEX E

DE RCWDDC 95 07/2335Z

P 072205Z SEP 67

FM CANPERSUNIT CALGARY

TO CANFORCEHED

BT

UNCLAS PSU 767 FOR CFOC UFO REPORT.

A. 3 JUL 67 APPROX 1700 HRS.

B. CLOUDY.

C. WARREN SMITH 3808-17 STREET SW CALGARY, ALTA.

D. APPROX 3 MILES SOUTH SOUTH EAST OF THE HIGHWOOD
RANGER STATION. APPROX 30 MILES WEST OF NANTON, ALTA.

E. WARREN GROVE CALGARY ALTA.

F. CIRCULAR, SHINY, ALUMINIUM, APPROX 25 FEET IN DIAMETER. FIRST
OBSERVED 2000 TO 2500 FEET ABOVE THE ALTITUDE OF THE OBSERVER,
BANKED AND DESCENDED MUCH LOWER, DISAPPEARED BEHIND THE TREES HEADING
SOUTH AT HIGH SPEED.

G. A LITTLE OVER A MINUTE. OBSERVER MANAGED TO TAKE TWO PHOTOGRAPHS.
NO SOUND NOTED HOWEVER THIS WAS PERHAPS RULED OUT BY A LIGHT BREEZE
BLOWING THROUGH TREES. NOT REPORTED EARLIER BECAUSE OBSERVER STATED
THAT WITHOUT PHOTOGRAPHS PEOPLE WOULD HAVE THOUGHT I WAS OUT OF MY
MIND. TWO SLIDES IN POSSESSION OF SENDER S/L CHASE CWA WARREN GROVE.
CF/PSU CALGARY WHO IS ARRANGING TO HAVE PRINTS MADE. MORE DETAILED
INFORMATION WILL ACCOMPANY PHOTOGRAPHS.

BT

DEPARTMENT OF NATIONAL DEFENCE
ROYAL CANADIAN AIR FORCE



MINISTÈRE DE LA DÉFENSE NATIONALE
AVIATION ROYALE DU CANADA

2050-1(DPIC)

18 Oct 67

Director of Operations
CFHQ, Ottawa

Attention: S/L Bain

PHOTOGRAPHIC ANALYSIS - TWO COPY COLOUR SLIDES OF ALLEGED UFO

References: A. V2000-4 Vol2(DOps) and UFO report received from Can
Pers Unit, Calgary dated 7 Sep 67

B. Telephone conversations S/L Bain and Mr Kelley 11-12 Oct 67

1. The analysis that follows was based on the subject UFO report together with verbal information obtained from Calgary and the Uplands Met Office.

2. Technical Data Used:

- a. Camera - Olympus PEN EE focal length 28mm
- b. Film ASA 64
- c. Shutter/speed f 2.8/ 1/25 sec
- d. Camera format 2 1/2 x 18mm
- e. Camera elevation 45° approx
- f. Cumulus cloud, base 10,000 ASL approx (Met Office)
- g. Observer 5,000 ASL approx
- h. Height of UFO above observer 2,000 - 2,500' estimated
- i. Interval between photographs - quick succession
- j. Location of observer - remote unpopulated area
- k. Observed - 1700 hrs 3 Jul 67

3. Photo Analysis.

- a. Assuming the photographs to be genuine, the UFO appears to have the form of an oblate ellipsoid or torus. The shadow detail in the photograph showing most roll is more suggestive of a torus than an oblate ellipsoid. Its outside surface appears to lack protrusions and highlight areas suggest a shiny, bright surface.
- b. From statistical data supplied the object has a diameter of 40' - 50' and has a depth of 11.5' to 14', giving a diameter/depth ratio of approximately 4 to 1.
- c. The diameter of the photograph images of the UFO is identical and its line of sight from the observer in each instance was similar indicating that the object was ascending or descending.

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- d. No other reliable analysis based on statistical data can be obtained.

4. Authenticity of Observers' Report and Photographs. A review of all technical data, that included camera details, observer's report, quality of photography and the meteorological report for 3 Jul 67 referred to in (2) above indicated a very acceptable degree of compatibility. If the story and photographs are a hoax, then it is a well prepared one, that would require on the hoaxer's part knowledge of photography and possibly photogrammetry to support the written and verbal information supplied. Alternatively the data supplied has produced a most fortunate and lucky combination of circumstances to make a hoax realistic.

5. Four exercises were undertaken in an attempt to discredit the authenticity of the incident. They were:

- a. Possible studio use of half format 35mm transparencies,
- b. Why one sharp and one fuzzy photograph?
- c. Could the observer see the UFO at the time and place, by comparing the observer's report on altitudes with the official weather report?
- d. Why no other reports of observation by other people? It should be mentioned that the possible answers to the questions were arrived at in DPIC, and subsequent data received verbally substantiated the answers and hence the possible feasibility of the story and photographs.

6. Each exercise will be discussed in turn:

- a. Exercise A. The copy transparencies supplied are half format 24 x 18mm, and it was found that the extensive cloud formation was identical in each photo although the same trees were occupying different portions of each photograph. Such an arrangement could be achieved by recopying one 36 x 24mm transparency on two overlapping 24 x 18mm formats to suggest two photographs were taken. A montage of the alleged UFO would be included with each 24 x 18mm copy transparency. A close study of each transparency showed in one area, minor changes in form of sky through the trees indicating that two photographs were taken on site. The identical cloud patterns were explained subsequently as the photographs were taken in quick succession with clouds at 10,000' and winds 15 mph.
- b. Exercise B. It was noted that one photograph was sharp and one was fuzzy. The camera used—the PEN EE has a fixed focus giving definition from seven feet to infinity. Fuzziness could only result in either deliberate out-of-focus recopying or camera movement. The camera movement would only be apparent at low shutter speeds. Subsequent information confirmed 1/25 sec at f2.8.
- c. Exercise C. The observer was at approximately 5,000' ASL and as stated the UFO was 2,000' - 2,500' above the observer, or 7,000' to 7,500' ASL. The Meteorological Office (Uplands) have confirmed cumulus cloud with base of 10,000' ASL. Any object at 7,500' would be visible.

* Reference CAMERAS by WD Emanuel and A Matheson (1963-4)

- d. Exercise D. The fact was queried that this was the only report of the incident. Subsequent information determined that the two observers (gold prospectors) were in a remote area, many miles from any frequently travelled highway or population centre.

6. Summary. The four exercises referred to above reasonably substantiate the observer's report, by both technical data and logic. The possibility of a photo montage combining a studio prepared UFO with each of two 24 x 18mm on-site shots cannot be proved or disproved. However, the image size of the UFO has been luckily selected if a fake was intended, particularly so when the image referred to is 0.395mm long, producing a realistic true size in relation to the observer estimation. A fair knowledge of optics and photogrammetry would be necessary to obtain a calculated size (40') that compared reasonably well with the estimated size (25') at 2,000' above the observer. Camera faults can probably be discounted as they are usually identical from frame to frame. The UFO image is of different form and location on each transparency.

7. It should be noted that a small object much closer to the observer i.e. a 2' diameter at 140' would achieve the same photographic effect. In this instance an automobile inner tube (i.e. a ~~tomb~~ ^{ton}) could equate. In one photograph the object appears low on the horizon and possibly close but behind the trees. Asked the distance of the trees from the observer, he stated 100 ft approximately.

8. Conclusion. The findings arrived at above are supported by technical data (with the stated reservations that include fake montage and range/object size relationship) and indicated that if a UFO was seen on 3 July, 30 miles WEST of Nanton, Alberta, at about 7000' ASL it had a diameter of 40' - 50' and a depth of 11.5' - 14'.

KJ Hope May

(KJ Hope) Maj

A/Commanding Officer

Defence Photographic Interpretation Centre

Reference 1086-1

603 Ave. K. South,
Saskatoon, Saskatchewan,
October 22, 1967.

S/L Bain
Canadian Forces Headquarters
D OPS
Ottawa 4, Ontario.

Dear Sir:

Re: Article in Saskatoon Star Phoenix October 14, 1967
regarding pieces dropped from U.F.O.'s.

1. On the evening of September 3, 1967 at about 21.⁴⁵ hours an object what I first thought was a piece of meteor, landed not more than three feet from me and lit up the entire area.
2. On closer investigation it was a piece of wire about six inches long. Nodules of burnt material are on the wire.
3. Both myself and a friend who was here at the time thought it might be an electrical wire from the area. This proved not to be the case. It was certainly a piece of wire from somewhere in outer space.
4. I wrote to S/L E.B. Chase, C.F.B. Calgary. He in turn asked me to forward this information to you along with the piece of wire. The wire is magnetic.
5. I would appreciate knowing of your investigation along with the composition of this material and also I would like to have at least part of this wire returned to me.
6. Hoping this will be of some value to you.

Yours truly,

Duncan L. Campbell

Duncan L. Campbell
Flying Officer
P ADO
702 RC(Air)C Squadron,
Saskatoon.

TUES
1900
2000

Bus
Home

6520221
242-4615

AREA 206

213

RC CFOC

W. W. Turner

V 2000-4 (Vol 4) (D Ops)

Canadian Forces Headquarters
Ottawa 4, Ontario

December, 1967

F/O Duncan L. Campbell
603 Avenue K. South
Saskatoon, Saskatchewan

Dear F/O Campbell:

Reference is made to your letter of 22 October 1967 in which you dispatched to CPHQ a portion of a wire found in your yard. We have examined the wire and believe it to be a portion of a sparkler normally utilized on the 24th of May. No other reported sightings were made from your area on 3 September, therefore, we are unable to relate your experience to any other phenomena.

In returning the wire to you as requested I would like to assure you that your interest in reporting this matter is appreciated.

Yours truly,

W. W. Turner
Colonel
for Chief of the Defence Staff

S/L W. Bain/2-2900/lv
Ops 4-2
Circ
File

213