

Retire

AD HOC COMMITTEE TO REVIEW
PROJECT "BLUE BOOK"
Feb 1966

Feb 1966

NW 90306 DocId:34714841 Page 1

Col Burger BB
lt col Steiner Hoo

DEPARTMENT OF THE AIR FORCE
AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (OAR)
ARLINGTON, VIRGINIA 22209



Attendees - meeting with Dr. James McDonald, University of Arizona
at the Pentagon 17 April 1967

Lt. Col. Harold A. Steiner, Ass't. Exec. Secre. USAF Scientific Advisory Board,
Pentagon, Room 5D982 Washington, D.C. Tele. 697-4648 (Code 11-74648).

Col. George Freeman, Chief, Civil Branch, SAFOI-C, Room 4A120, The Pentagon,
Washington, D.C. Tele. 697-1128 (Code 11-71128).

Col. Marvin Stanley, Chief, Public Information Division, SAFOIP, Room 4C922,
The Pentagon, Washington, D.C. Tele. 695-5554 (Code 11-55554).

H. Philip Hovnanian, Program Engineer, NASA Hq. Room F50016, 400 Maryland Ave., S.W.
Washington, D.C. Tele. 962-4961 (Code 13-24961).

George H. Duncan, Advanced Programs & Technology Manager, NASA Hq. Room 50016,
400 Maryland Ave., S.W. Washington, D.C. Tele. 962-4961 (Code 13-24961).

Dr. Dale W. Jenkins, Ass't Director (Science), NASA Hq. Office of Space Science &
Applications Room F50078, Washington, D.C. Tele. 962-4621 (Code 13-24621).

Hans Dolezalek, Atmospheric Scientist, ONR Branch Office, 495 Summer Street,
Boston, Massachusetts 02210. Tele. 696-3563 (Code 11-63563).

Mr. James Hughes, Head, Atmospheric Science Program, Office of Naval Research,
Code 412, Washington, D.C. 20360. Tele. 696-6739 (Code 11-66739).

Phillip V. Mitchell, Technical Staff Member, Institute for Defense Analyses,
400 Army-Navy Drive, Arlington, Va. 22202. Tele. 558-1641.

Joseph Coates, Senior Staff Member, Institute for Defense Analyses, 400 Army-
Navy Drive, Arlington, Va. 22202. Tele. 558-1653.

Lynn E. Catoe, Library of Congress, Science & Technology Div., UFO Bibliography
Project, Washington, D.C. Tele. 967-8088.

Dan Taylor, Staff Information Officer, AFOSR (SRGC) Arlington, Va. 22209.
Tele. 694-4875. (Code 11-44875).

Maj. Joseph P. Martino, Ass't. Exec. Dir. Research Communication, AFOSR (SRGC)
Arlington, Va. 22209. Tele. 694-4875 (Code 11-44875).

Dr. J. Thomas Ratchford, Project Scientist, AFOSR (SRPS) Arlington, Va. 22209.
Tele. 694-5588 (Code 11-45588).

Maj. William Metscher, Physicist, Hq. OAR (RROSP) Arlington, Va. 22209.
Tele. 694-5505 (Code 11-45505).

DAN TAYLOR
Staff Information Officer

UNCLASSIFIED

X

PRIORITY

File Copy

CSAF

Dr. Brian O'Brien
Consulting Physicist
P.O. Box 117
Pomfret, Connecticut 06258

Dr. Lauror F. Carter
Vice President
System Development Corporation
2500 Colorado Avenue
Santa Monica, California

Dr. Jesse Orlansky
Institute for Defense Analyses
400 Army-Navy Drive
Arlington, Virginia 22202

Dr. Richard W. Porter
General Electric Company
Engineering Services
570 Lexington Avenue
New York, New York 10022

Dr. Carl Sagan
Smithsonian Astrophysical Observatory
60 Garden Street
Cambridge, Massachusetts 02138

Dr. Willis H. Ware
Head, Computer Sciences Department
The RAND Corporation
1700 Main Street
Santa Monica, California 90406

Major Hector Quintanella
Foreign Technology Division
Wright-Patterson AFB, Ohio

DISTRIBUTION:

AFRISA (Lt Col
Hippler)
BAFOI (Mrs.
Sarah Hunt)

82596

13 1000

APR 1966

Lt Col Harold A. Steiner
AFRISA

74648

UNCLASSIFIED

PRIORITY

Lt Col Harold A. Steiner Lt Col Harold A. Steiner 74648

UNCLAS AFBSA 82596 APR 1966.

1. Please refer to report of the SAB Ad Hoc Committee to review Project Blue Book.

2. The Air Force has decided to implement the Committee's recommendation to ^{perform} areal investigation teams composed of representatives from universities. It has been suggested that Dr. O'Brien and other members of the Committee meet with representatives of the Air Staff on 19 April to advise them on how to implement the plan. If you cannot personally attend this meeting, please provide me not later than 18 April your suggestions of university people who you think suitable to serve on the investigation team. These names should be submitted based on your knowledge and specialty and should be selected to give areal coverage of the entire CONUS.

3. Please call me at your earliest convenience at Area Code 202 - 697-4648 or 697-8845 if you want to discuss this further.

HAROLD A. STEINER, Lt Col, USAF
Assistant Secretary
USAF Scientific Advisory Board

USAF SCIENTIFIC ADVISORY BOARD
AD HOC COMMITTEE TO
REVIEW PROJECT BLUE BOOK
Room 5D-1014, the Pentagon
1400, 19 April 1966

MEETING STATISTICS

I. Agenda:

1400 Purpose of Meeting Lt Colonel Steiner, SAB
1410 Discussion All attendees
1630 Adjourn

II. Purpose and Place: To discuss how best to implement the recommendations made by the SAB Ad Hoc Committee to Review Project Blue Book. The discussion was held in Room 5D-1014, the Pentagon.

III. Those Present and Purpose Thereof:

<u>Name</u>	<u>Purpose</u>	<u>Affiliation</u>
Dr. Brian O'Brien	Chairman	Consultant
Dr. Jesse Orlansky	Member	IDA
Col Robert Burger	SAB Secretary	AFBSA
L/Col Robert Hippler	Participant	AFRSTA
Mrs. Sara Hunt	Participant	SAFOI
L/Col Harold A. Steiner	SAB Secretary	Hq USAF (AFBSA)

IV. Reports, Contributions, Proposals, etc. issued, received, reviewed, approved, prepared or disseminated during the proceedings:

Reviewed - Report of the SAB Ad Hoc Committee to Review Project Blue Book, March 1966.

V. Verbatim Record: (see attached)

VI. Certification:

These meeting statistics are certified as being true and correct.



HAROLD A. STEINER, Lt Colonel, USAF
Assistant Secretary
USAF Scientific Advisory Board

1 Atch
Record, dated 20 Apr 66

HEADQUARTERS UNITED STATES AIR FORCE
USAF SCIENTIFIC ADVISORY BOARD
OFFICE OF THE SECRETARY OF THE AIR FORCE & CHIEF OF STAFF

DATE 21 April 1966

MEMO FOR: Record

The following distribution was made on Memo for Record, 20 Apr 66, regarding UFO Meeting 1400, 19 April 66, Room 5D-1014:

6 copies made

Original--~~#1 of 6 - filed UFO Folder-AFBSA~~ *Destroyed*

#2 of 6 - mailed to Dr. Stevers

#3 of 6 - sent to Lt Col Hippler, AFRSTA

#4 of 6 - sent to Mrs. Sara Hunt, SAFOI

#5 of 6 - circulated within AFBSA *filed in Master file with report.*

~~#6 of 6 - filed as extra copy in AFBSA~~
Destroyed

mjm

USAF SCIENTIFIC ADVISORY BOARD
AD HOC COMMITTEE TO
REVIEW PROJECT BLUE BOOK
HQ FTD, WRIGHT-PATTERSON AFB, OHIO
3 FEBRUARY 1966

MEETING STATISTICS

- I. Agenda: (see attached)
- II. Purpose and Place: To review the resources, methods and findings of Air Force Project Blue Book and to advise the Air Force as to any improvements that should be made in the program to carry out the Air Force's responsibility. Briefings held in Commanders Conference room at Hq, FTD. Discussions and review of case files held in Project Blue Book office.

III. Those Present and Purpose Thereof:

<u>Name</u>	<u>Purpose</u>	<u>Affiliation</u>
Dr. Brian O'Brien	Chairman	Consultant
Dr. Launor F. Carter	Member	System Development Corp.
Dr. Jesse Orlansky	Member	IDA
Dr. Richard Porter	Member	GE Company
Dr. Carl Sagan	Member	Smithsonian Astrophysical Observatory
Dr. Willis H. Ware	Member	Rand Corporation
L/Col John P. Spaulding	Briefer	SAFOI
Dr. Anthony Cacioppo	Participant	FTD
Col Warren Wheeler	Participant	FTD
Maj Hector Quintanella	Briefer	FTD
Mr. Francis Arcier	Participant	Consultant to FTD
Col Florian Holm	Briefer	FTD
L/Col Harold A. Steiner	SAB Sec	Hq USAF (AFBSA)

IV. Reports, Contributions, Proposals, etc. issued, received, reviewed, approved, prepared or disseminated during the proceedings:

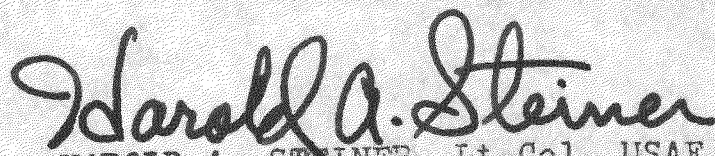
Reviewed: Robertson Report, dated 17 January 1953
Selected case histories from Project Blue Book

Distributed: Compilation of Project Blue Book Methods and Case Histories, dated 3 February 1966

V. Verbatim Record: None

VI. Certification:

These meeting statistics are certified as being true and correct.


HAROLD A. STEINER, Lt Col, USAF
Assistant Secretary

AD HOC COMMITTEE ON
UNIDENTIFIED FLYING OBJECTS (UFOs)

AGENDA

Thursday, 3 February 1966

0800	Welcoming Remarks	Commander or Vice Commander, FTD
0805	Introduction	Dr. O'Brien, SAB
0810	The Air Force Problem	Lt Col Spaulding, SAFOI
0830	Briefing on Project Blue Book	Major Quintanilla, FTD
1000	Break	
1015	Review of Selected Case Histories	FTD Staff
1145	Lunch	
1315	Executive and Writing Session	

APPROVED:



HAROLD A. STEINER, Lt Colonel, USAF
Assistant Executive Secretary
USAF Scientific Advisory Board

22 December 1965

MEMO FOR RECORD

20 April 1966

SUBJECT: Implementing SAB Ad Hoc Committee on Project Blue Book
Recommendations

1. The following personnel met at 1400 on 19 April in Room 5D-1014 to discuss how best to implement the recommendations made by the SAB Ad Hoc Committee to review Project Blue Book.

Dr. Brian O'Brien
Dr. Jesse Orlansky
Lt Col Robert Hippler, AFRTSA

Colonel Robert Burger, AFBSA
Lt Col Harold Steiner, AFBSA
Mrs. Sara Hunt, SAFOI

2. On 5 April 1966, Secretary of the Air Force Harold Brown, in a memorandum to the Chief of Staff, stated that the Committee's recommendations should be accepted and arrangements made for a (sic) scientific team to investigate in depth certain selected sightings of UFOs. General Ferguson was given responsibility for implementing the Committee's recommendations and Lt Colonel Hippler is project officer.

3. Although the Committee's recommendation was clear and succinct, initially there was no unanimous agreement on how to put this recommendation into effect. A basic question is:

(1) Should the contract be with a university or should it be with individuals connected with a university? A great deal of the meeting was taken up discussing these facets of the problem and a clear answer did not evolve. Therefore, it is probable that I, and perhaps some selected members of the Committee, may be asked to meet with Colonel Hippler again.

4. Generally, the concept of using universities (or individuals from universities) is good. Specifically, however, there needs to be a lead university to coordinate and collate the investigations. After some discussion, it was suggested that the University of Dayton is probably most appropriate because it is located close to Hq FTD who will retain management of Project Blue Book. Other universities were suggested that could provide personnel to give areal coverage of CONUS. They are listed below.

East
Rensselaer, Troy, N.Y.
Columbia
NYU
Univ of Conn.
Yale
Cornell
Univ of Dayton
Carnegie Tech

West
Utah
Colorado
Iowa
Wisconsin
Illinois
Chicago
Univ of Calif (Berkeley)
UCLA
Oregon
Washington
Rice
Univ of Texas

South
Vanderbilt
Duke
Univ of Florida
Georgia Tech
Univ of Georgia

File

Chairman _____
✓ Secretary _____
✓ Technical Director _____
✓ Asst. Secretary _____
✓ Asst. Secretary _____
✓ Asst. Secretary _____
✓ Asst. Secretary _____
Admin. Asst. _____

Copy Nr 5 of 6 Copies

NW 90306

DocId:34714841 Page 9

For Official Use Only

Colonel Hippler pointed out that it will probably be September before he gets the money to implement this plan. Dr. Orlansky pointed out that because of the summer holiday, Colonel Hippler should make contact with the universities before the end of May.

5. Since we are dealing with an emotional phenomenon, there was some discussion about whether universities (i.e., their presidents) would be willing to get involved with UFOs. Dr. O'Brien suggested that Dr. Stever, as President of Carnegie Tech, might send letters to a few selected university presidents with whom he is acquainted to get some idea of their feelings on this matter. (ACTION: AFBSA). In this way we can learn what a typical reaction might be and also some of the pitfalls to avoid when contacting other universities.

6. There are still several unanswered questions or problem areas:

(a) Since the problem is 99% public relations, it is essential that the investigating teams have some modicum of skill in press relations. It was strongly suggested that a good solid PIO type (perhaps incognito) be included on the first few investigation teams. This caused quite a bit of discussion and a final answer did not evolve.

(b) The objective is to have impartial scientists from schools with good reputations that have never been involved with UFOs.

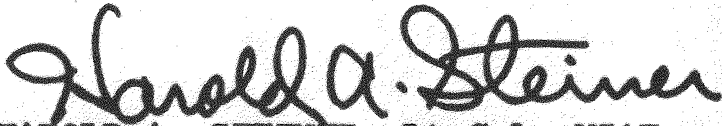
(c) Considerable thought must be given to how the contract or contracts are to be written.

(d) In order to utilize their talents to the best advantage, it was proposed and accepted that Dr. J. Allen Hynek and Dr. Donald Menzel form the nucleus of a Consultant-Advisor team to work with Hq FTD in determining which sightings the university team should investigate.

(e) When teams are selected, it is strongly recommended that they be brought together at some certain location such as Hq FTD and given a thorough briefing on what is expected of them. This briefing should cover all of the intangibles and pitfalls that must be avoided in order to give good Air Force public relations.

(f) Another question that was not fully resolved is how AFSC should get into the act. The Committee's original thought was that someone from the nearest AFSC base should work with the investigating team. The Committee also recommended that a member of the OSI might work with the university teams and give them the benefit of their investigating experience. It was questioned whether this would help or hurt the Air Force effort. Neither of these questions were fully resolved.

(g) It was pointed out that the National Research Council had conducted an exercise in Disaster Research which had involved some investigating teams similar to the ones we are discussing. Although the committee is now defunct, Mrs. Marjorie Wilson, Government Code 1224 - 230/239 has their reports and will be glad to let us review them.



HAROLD A. STEINER, Lt Col, USAF
Assistant Secretary
USAF Scientific Advisory Board

MEMO ROUTING SLIP		NEVER USE FOR APPROVALS, DISAPPROVALS, CONCURRENCES, OR SIMILAR ACTIONS		ACTION	
1 TO	AFBSA (Mr. Hasert) <i>HP</i>	INITIALS	CIRCULATE		
		DATE	COORDINATION		
2 <i>Col. Steiner -</i> <i>Let's file with the O'Brien UFO center</i>			FILE		
			INFORMATION		
3			NOTE AND RETURN		
			PER CONVERSATION		
4			SEE ME		
			SIGNATURE		
REMARKS					
FROM		DATE			
AFRDQ-P (Mr. Baillie)		PHONE			

DD FORM 95
1 OCT 60

Replaces DD Form 94, 1 Feb 50 and DD Form 96, 1 Feb 50 which will be used until exhausted.

☆ GPO: 1960-O-568294

1100
File
UFO

COPY

AFRDQ-P

31 July 1967

Special Report of the USAF Scientific Advisory Board Ad
Hoc Committee to Review Project "Blue Book"

USAIRA (DATT - Mr. David Smith & Mr. Peer DeSilva)
American Embassy
APO San Francisco 96346

Copies of the subject report are forwarded at the request of Mr. Jesse Orlansky, a member of the Scientific Advisory Board Committee on UFO's.

FOR THE CHIEF OF STAFF

MILTON COLLIER, Colonel, USAF
Chief, Requirements Plans Group
D/Operational Requirements &
Development Plans, DCS/R&D

1 Atch
Special Report of the
USAF SABAd Hoc Com-
mittee to Review
Project "Blue Book" dtd
Mar 66, 2 cys

COPY

INSTITUTE FOR DEFENSE ANALYSIS

Research and Information Support Division



August 16, 1967

Mr. Peer de Silva
Special Assistant for
Counterinsurgency
Embassy of the United States
Bangkok, Thailand

Dear Mr. de Silva:

When Dr. Tanham and his committee, of which I am a member, were in Thailand, we heard on several occasions about the helicopter sightings. Then, the Ambassador said that the nature of these reports was like that concerning UFO's. That reminded me that last year, the Air Force asked its Scientific Advisory Board to look at the UFO's and that a committee, under Brian O'Brien prepared a report. I thought you might be interested in that report and have asked the SAB Secretariat to send you a copy.

The committee recognized that the Air Force had been investigating the reported sightings very seriously but that, because of limited resources, the investigations tended to be incomplete and inconclusive. It recommended that some university be provided the means to examine impartially, scientifically and in great detail a selected number of sightings. I won't elaborate on the details other than to say that the committee concluded that a valid explanation requires a careful investigation.

While in Bangkok, I did not have the time to examine the way in which the helicopter sightings were collected and evaluated and have no reason to suggest that the present procedures are incomplete. Moreover, it may even be that the whole matter is not important enough to warrant any further attention. In any case, it may be useful to know how the Air Force went about its problem. A contract was given to the University of Colorado and its report is expected some time this Fall.

For your information, a copy of the report was also sent to David Smith.

Respectfully,

Jesse Orlansky

JO:mh
cc: H. Guyford Stever
Chester Hasert
George Tanham
S. J. Deitchman
Warran Stark

18 May 1966

SUBJECT: Conversation with Dr. Stever Concerning SAB Support to USAF Investigations of UFOs

1. On 17 May I discussed SAB support to USAF investigations of UFOs with Dr. Stever. In a previous letter (dated 21 April 66), we had asked Dr. Stever to informally query some of his university-president colleagues to determine the best *modus operandi* for approaching universities and asking them to provide people and resources to investigate scientifically selected UFO sightings as recommended by the SAB Ad Hoc Committee. This memo documents his findings and conclusions on this matter.

2. On the basis of his informal contacts with university presidents, Dr. Stever believes the Air Force will get mixed reactions to its request to universities. On the negative side of the picture, he has gleaned these general reactions:

a. It may be against some school's policy to make contractual arrangements with the government.

b. Some universities will have no interest or have any qualified investigators.

3. On the positive side, the following reactions were received:

a. Some universities will do the job under contract.

b. Some would like to do the job from a research aspect. (NOTE: Dr. Stever commented that this may be the "foot in the door" approach to request additional research funds for work at the university that may be construed to be related to the UFO investigation.)

4. Dr. Stever believes that, as a whole, the smaller universities will be more receptive than the larger ones.

5. Dr. Stever has had some second thoughts on the SAB (specifically, him) sending the initial letters to the selected universities. He believes that the letter should come from and be signed by an action office within the Air Force. The letter might refer to the recommendations of the SAB scientific committee as a basis for the Air Force actions to initiate a more scientific approach in future selected UFO investigations. In other words, instead of a letter from a college president to a college president, Dr. Stever felt the Air Force could make a very acceptable case if it framed its letter around these two points:

a. The value of participating in such investigations to the school, and

b. The value to the Air Force and the nation.

6. Dr. Stever stated that he would be happy to review and critique the draft letter from a university president's viewpoint.

7. Dr. Stever also suggested that OSR could probably advise which universities are most likely to cooperate and since most universities have had dealings with OSR, perhaps that organization could offer some advice on the initial letter and maybe even send the letter from that office.



ROBERT J. BURGER, Colonel, USAF
Secretary
USAF Scientific Advisory Board

Copies to: Lt Col Hippler, AFRST
Mrs. Hunt, SAFOI
Dr. Brian O'Brien

AFB3A

Implementation of SAB Ad Hoc Committee's
Recommendations

21 April 1966

Lt Col Hippler, AFHSTA

1. Some of the members present at the meeting on 19 April have had some after-thoughts which I believe you should consider.
2. First, there is a feeling that perhaps sufficient thought is not being given to how the Air Force is going to implement the plan. Typical questions are:
 - a. Specifically, what is the Air Force going to do?
 - b. Specifically, how is it going to do it?
3. Since answers to these questions are not obvious, there is a strong feeling here that the Air Force should get two or three consultants from the academic community, Hq AFSC, and FTD together and have them do some constructive thinking on how to solve the mechanics of the problem and avoid the pitfalls and vagaries that are bound to crop up.
4. Another area of concern is the lag between May and September when funds will become available. A lot of Air Force enthusiasm for the program can fall through the cracks during that period. Perhaps this lag period can be put to good use by using it to think the problem out as discussed in the paragraph above.
5. These are just some random thoughts I am passing on for your consideration.

HAROLD A. STRINER, Lt Col, USAF
Assistant Secretary
USAF Scientific Advisory Board

OFFICE OF THE SECRETARY

APR 5 1962

L. _____
 CDS ✓
 CFC ✓
 CAY _____
 Action: R.O.C.
 Sig: _____
 Supp: 13 APR
 Info: WIA
SAFCI

Attached is a copy of the Special Report of the SAB Ad Hoc Committee to Review Project "Blue Book."

Harold Brown
Harold Brown

Attachment

(LCHIPPLED) ACTION 2
RSTA
SUSPENSE
DATE 12 April 68
INFO:

HDC-N

DEPARTMENT OF THE AIR FORCE AIR STAFF SUMMARY SHEET

	TO	ACTION	SIGNATURE (Surname and Grade)		TO	ACTION	SIGNATURE (Surname and Grade)
1	Lt Gen Ferguson	AFRDC		6			
2				7			
3				8			
4				9			
5				10			

SURNAME OF ACTION OFFICER AND GRADE Lt Colonel Steiner	SYMBOL AFBSA	PHONE 78845	TYPIST'S INIT. mjm	SUSPENSE DATE
---	-----------------	----------------	-----------------------	---------------

SUBJECT
SAB Ad Hoc Committee Report

DATE
30 March 1966

SUMMARY

1. Attached for your signature is a letter transmitting to General LeBailly the Special Report of the SAB Ad Hoc Committee to Review Project Blue Book.

2. The Committee was formed and the report is being submitted in response to General LeBailly's memorandum to you on 28 September 1965 (Atch 2) requesting that the SAB review Air Force Project Blue Book. The objective of this investigation was to determine if and how the Air Force could improve its program for investigating UFO's. The Committee concluded that the program can be improved by conducting a more thorough scientific investigation of questionable sightings, and recommended a method for doing this.

3. Recommended distribution is:

Number of Copies

SAFOI	25
AFRDC	1
Committee Members	1 each
Commander, FTD	5
AFSC DCS/Foreign Technology	2
SAB Secretariat	2
Chairman, SAB	1

4. After your signature and approval of the recommended distribution, we will take appropriate action to forward the copies of the report.



ROBERT J. BURGER, Colonel, USAF
Secretary
USAF Scientific Advisory Board

2 Atch
1. Ltr of Transmittal
2. SAFOI Memo, 28 Sep 65

AFESA

1 APR 1966

SAB Review of Project Blue Book

Major General E. B. LeBailly
SAFOI

1. Please refer to your memorandum to me on 28 September 1965 requesting a review of Project Blue Book by the USAF Scientific Advisory Board.
2. In response to your request, the SAB formed an ad hoc committee under Dr. Brian O'Brien to investigate the adequacy and timeliness of Project Blue Book. The Committee's report recommends a procedure for strengthening the scientific investigation of questionable sightings of UFOs.
3. Twenty-five copies of the report are being submitted for your use. Please let us know if the SAB can be of further assistance in this matter.

Signed

JAMES FERGUSON, Lt General, USAF
Military Director
USAF Scientific Advisory Board

1 Atch
Report (25 cys)

DEPARTMENT OF THE AIR FORCE AIR STAFF : WORK SHEET

	TO	ACTION	SIGNATURE (Surname and Grade)		TO	ACTION	SIGNATURE (Surname and Grade)
1	Gen Ferguson			6			
	Mil Dir, SAB						
2				7			
3				8			
4				9			
5				10			

SURNAME OF ACTION OFFICER AND GRADE

Col Burger

SYMBOL

AFBSA

PHONE

74811

TYPIST'S INIT.

al

SUSPENSE DATE

SUBJECT

SAB Information/Action Item

DATE

5 October 1965

SUMMARY

1. This request arrived in our office today apparently without your seeing it.

2. I discussed it briefly with Dr. Stever and his initial reaction was lukewarm. He questioned the value of a review of the UFO program by the SAB. He suggested that we might talk to some other SAB members knowledgeable in this area to get their opinion on the value of such an SAB undertaking. We thought of Brian O'Brien (FTD/DAG), Jesse Orlansky (Psychology), Dick Porter (Geophysics), and possibly Court Perkins and Dr. Markey.

3. Before we do this, however, Dr. Stever thought we should get your views on this to see if perhaps there is some additional information or facts which would give a clue on why the request was made.

Robert J. Burger

ROBERT J. BURGER, Colonel, USAF
Secretary
USAF Scientific Advisory Board

Atch
Memo on UFOs

*Lets bring this up at Exec Comd meetings
in Nov. J*

TABC

DEPARTMENT OF THE AIR FORCE
WASHINGTON

OFFICE OF THE SECRETARY

SEP 28 1965

MEMORANDUM FOR MILITARY DIRECTOR, SCIENTIFIC ADVISORY BOARD

SUBJECT: Unidentified Flying Objects (UFOs)

In keeping with its air defense role, the Air Force has the responsibility for the investigation of unidentified flying objects reported over the United States. The name of this project is Blue Book (Attachment 1). Procedures for conducting this program are established by Air Force Regulation 200-2 (Attachment 2).

The Air Force has conducted Project Blue Book since 1948. As of 30 June 1965, a total of 9267 reports had been investigated by the Air Force. Of these 9267 reports, 663 cannot be explained.

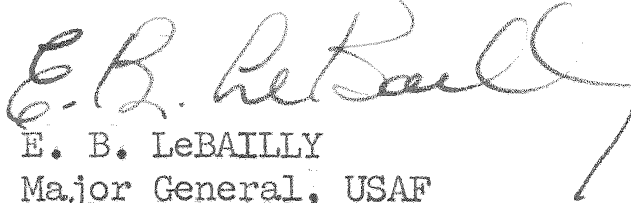
It has been determined by the Assistant Deputy Chief of Staff/Plans and Operations that Project Blue Book is a worthwhile program which deserves the support of all staff agencies and major commands and that the Air Force should continue to investigate and analyze all UFO reports in order to assure that such objects do not present a threat to our national security. The Assistant Deputy Chief of Staff/Plans and Operations has determined also that the Foreign Technology Division (FTD) at Wright-Patterson Air Force Base should continue to exercise its presently assigned responsibilities concerning UFOs.

To date, the Air Force has found no evidence that any of the UFO reports reflect a threat to our national security. However, many of the reports that cannot be explained have come from intelligent and technically well qualified individuals whose integrity cannot be doubted. In addition, the reports received officially by the Air Force include only a fraction of the spectacular reports which are publicized by many private UFO organizations.

Accordingly, it is requested that a working scientific panel composed of both physical and social scientists be organized to review Project Blue Book -- its resources, methods, and findings -- and to advise the Air Force as to any improvements that should be made in the program in order to carry out the Air Force's assigned responsibility.

Doctor J. Allen Hynek who is the Chairman of the Dearborn Observatory at Northwestern University is the scientific consultant to Project Blue Book. He has indicated a willingness to work with such a panel in order to place this problem in its proper perspective.

Doctor Hynek has discussed this problem with Doctor Winston R. Markey, the former Air Force Chief Scientist.


E. B. LeBAILLY
Major General, USAF
Director of Information

2 Attachments

1. Blue Book Report
2. AFR 200-2

1405 Col Manici info

I N S T I T U T E F O R D E F E N S E A N A L Y S E S

Science and Technology Division



400 Army-Navy Drive, Arlington, Virginia 22202 • Telephone (703) 558-1000

February 13, 1969

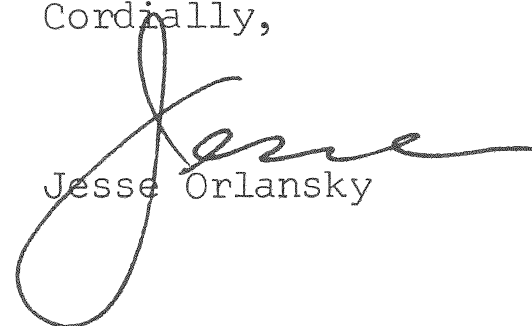
Lt. Colonel Harold A. Steiner, USAF
Assistant Executive Secretary
USAF Scientific Advisory Board
Department of the Air Force
Headquarters United States Air Force
Washington, D.C. 20330

Dear Hal,

I appreciate your thoughtfulness in sending me a copy of the Condon Report on UFO's. He and his group seem to have done a tremendous job, just about what our committee thought was needed. I guess we were very lucky to have reviewed the situation in such timely fashion in 1966. The fine endorsement of his work by the National Academy of Sciences confirms that Condon has done what was needed.

It is a pleasure to see this fruitful outcome to our recommendation and I appreciate having the report.

Cordially,


Jesse Orlansky



SYSTEM DEVELOPMENT CORPORATION

2500 Colorado Avenue • Santa Monica, California 90406

February 28, 1969

UFO

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Lt. Colonel Harold A. Steiner
USAF Scientific Advisory Board
Headquarters U. S. Air Force
Washington, D. C. 20330

Dear Colonel Steiner:

Thank you very much for sending me the Condon Report and the National Academy of Sciences review of the report. I have not yet had time to read the complete report but have glanced through it, and it certainly seems comprehensive. The National Academy review certainly gives it good credibility and ought to take care of any serious criticism.

Cordially yours,

Laurin F. Carter
Vice President and Manager
Public Systems Division

LFC:db

20330

12 February 1969

Dr. H. Guyford Stever
President
Carnegie-Mellon University
Pittsburgh, Pennsylvania 15213

Dear Dr. Stever

I am pleased to send you this personal copy of the Condon Report on Unidentified Flying Objects. No doubt you will be surprised, as I was, at the depth of the University of Colorado study. Little could we guess when the O'Brien SAB Committee met in February 1966 that it would serve as a springboard for this voluminous effort. Personally, I am satisfied with the results of the study and believe it puts the Air Force in an excellent position to counter criticism.

Sincerely

HAROLD A. STEINER, Lt Colonel, USAF
Assistant Executive Secretary
USAF Scientific Advisory Board

1 Atch
Condon Report (3 Vols)

LtCol Steiner/dd/12Feb69

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12 Feb 69

20330

6 February 1969

Dr. Brian O'Brien
Consulting Physicist
Box 52
North Woodstock, Connecticut 06257

Dear Dr. O'Brien

I am pleased to send you this personal copy of the Condon Report on Unidentified Flying Objects. No doubt you will be surprised, as I was, at the depth of the University of Colorado study. Little could we guess when we met as a committee in February 1966 that a by-product would be these voluminous documents. Personally, I am satisfied with the contents and believe the Air Force got its money's worth.

I am happy to have served with you in this exercise and I hope that you feel as I do that it was worthwhile.

Sincerely

HAROLD A. STEINER, Lt Colonel, USAF
Assistant Executive Secretary
USAF Scientific Advisory Board

1 Atch
Condon Report (3 Vols)

SAME LETTER TO: Dr. Launor F. Carter
Mr. Jesse Orlansky
Dr. Richard Porter
Dr. Carl Sagan
Dr. Willis H. Ware

20330

AFESA

27 February 1968

Request for Project Blue Book Material

Mr. Don Berliner
National Investigations Committee
on Aerial Phenomena
1536 Connecticut Avenue, N. W.
Washington, D. C. 20036

This is in response to your visit on 26 February 1968 during which you requested we provide you with Project Blue Book material. I have been advised that we can provide you with copies of the material you requested at a cost of \$5.00. If you are still interested in obtaining copies, please make your check or money order for that amount payable to the "Treasurer of the United States" and send it to this office.

HAROLD A. STEINER, Lt Colonel, USAF
Assistant Executive Secretary
USAF Scientific Advisory Board

Sehe
27 Feb 1968

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1 March 1968

AFBSA

Project Blue Book Material

Mr. Don Berliner
National Investigations Committee
on Aerial Phenomena
1536 Connecticut Avenue, NW
Washington, D. C. 20036

1. This is in response to your letter of 28 February 1968 requesting and paying for material prepared for the USAF Scientific Advisory Board by the Project Blue Book office.
2. Copies of this material are attached. A fee of \$5 was based on the unit cost of 25¢ per page plus \$3 per hour labor.

HAROLD A. STEINER, Lt Colonel, USAF
Assistant Executive Secretary
USAF Scientific Advisory Board

1 Atch
Project Blue Book Material

Lab
1 March 1968

sent 1 Mar 68
Lab

NATIONAL INVESTIGATIONS COMMITTEE

ON AERIAL PHENOMENA

MAJOR DONALD E. KEYHOE
USMC (RET.) DIRECTOR

WASHINGTON, D. C. 20036

GORDON I. R. LORE, JR.
ASSISTANT DIRECTOR

Feb. 28, 1968

ADMINISTRATIVE OFFICES:
1536 CONNECTICUT AVE., N.W.

TELEPHONE: (202) 667-9434

Lt. Col. Harold A. Steiner
Assistant Executive Secretary
USAF Scientific Advisory Board
HQ, USAF
Washington, D.C. 20330

Dear Col. Steiner:

Enclosed is my personal check for \$5.00 to cover the cost of reproducing the pages of Project Blue Book material which we discussed on Feb. 26.

Many thanks for your cooperation.

Sincerely,



Don Berliner
NICAP Staff

A privately-supported fact-finding body serving the national public interest

20330

AFDASBA/SSgt Ehrlich/74835

Request for Project Bluebook Reports

20 Feb 68

Mr. Don Berliner
National Investigations Committee
on Aerial Phenomena
1536 Connecticut Avenue
Washington, DC 20036

1. Reference your request directed to SAF-OICC for portions of Project Bluebook Reports.
2. We maintain a reference copy of the material you requested and can furnish you photographic copy at a cost of \$12.75. If you are interested in purchasing a copy, please make your check or money order payable to "Treasurer of the United States" and remit to this office.


ELLIS F VILLIARD
Chief, Information Branch
Directorate of Administrative Services

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INSTITUTE FOR DEFENSE ANALYSES

Research and Engineering Support Division



400 Army-Navy Drive, Arlington, Virginia 22202, Telephone (703) 558-1000

July 27, 1967

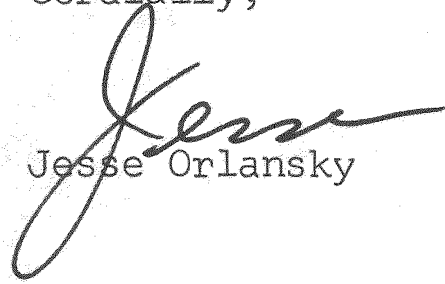
Mr. Chester N. Hasert
Acting Executive Secretary
USAF Scientific Advisory Board
Room 5D1014, The Pentagon
Washington, D. C.

Dear Chet:

When I was in Thailand last week, I spoke to several men at the U.S. Embassy who told me about an interesting problem that faces them. Very simply, the Thai government has made numerous reports of mysterious helicopter flights in the North-east part of the country near Laos, an area in which Communist terrorists have been increasing their activity. Although the members of the U. S. Embassy take these reports very seriously, they have never been able to authenticate a single valid sighting.

I would not have given this matter any further thought except that someone said the reports of these sightings were very much like the reports of UFO's meaning, thereby, that one unusual report is likely to inspire additional ones. It seemed to me that the SAB report on UFO's might be useful to these men in the sense that it would provide them with a basis for seeing that a more valid understanding of the problem could require a more thorough examination than has been possible up to now. It is with this suggestion in mind that I hope you will be able to send a copy of the report to two men in the Embassy very much concerned with this matter. They are Peer de Silva and David Smith. Mr. de Silva is Special Assistant for Counterinsurgency and Mr. Smith is Special Assistant to the Ambassador. I hope that it will be possible for our Embassy in Thailand to take advantage of the work done by the SAB committee chaired by Brian O'Brian.

Cordially,


Jesse Orlansky

JO:mh

cc: Dr. H. Guyford Stever

16 May 1967

SUBJECT: Some Notes Concerning a Progress Report on
University of Colorado UFO Study

1. On 5 May 1967, members of the University of Colorado UFO Investigating Committee presented a "position paper" on the state of their thinking on the UFO Study. This memo is based on verbatim notes taken at that meeting and augments the formal presentation (Atch 1). A report of the Committee's progress up to 31 March is also included (Atch 2).

2. The meeting was held in Dr. Bill Price's office at OSR. The following personnel attended:

Dr. Edward V. Condon, Univ of Colorado (UOC), Principal Investigator

Mr. Robert J. Low, UOC, Project Coordinator

Dr. W. K. Hartman, Univ of Arizona, a member of the UOC Study Committee

Dr. William Price, OSR

Dr. Tom Ratchford, OSR

Dr. Jesse Orlansky, SAB

Dr. Willis Ware, SAB

Mr. Chester N. Hasert, SAB

Lt Col Harold A. Steiner, SAB

Lt Col Robert Hippler, AFRSTA

Mr. Charles K. Reed, Nat Acad of Sciences

Mr. L. V. Brasher, OSR Procurement

Mr. Dan Taylor, OSR Public Information

3. The basic problem confronting the UOC Study Committee is establishing a methodology for investigating UFOs. In the Committee's opinion, previous investigations have produced few, if any, tangible results because these studies have primarily been concerned with investigating sightings.

According to the UOC Committee, the basic question is not the sighting per se but how to interpret the data obtained from reports that are generated from sightings. Thus, additional sightings as currently handled by Project Blue Book (NOTE: no criticism of Project Blue Book was inferred) will not give the Committee a better picture of what UFOs really are. Something else is needed.

4. Admittedly, if better data were available (i.e., those obtained with spectrometers, magnetometers, etc.) they could undoubtedly give the Committee a better insight into the UFO problem, but in the 18 months allotted for the study the probability of the UOC Committee getting significantly better data is small. The possibility of getting actual, real-time data with spectrometers, magnetometers, etc., is highly unlikely. Ergo, the concept of having specialized, instrumented teams standing ready to move quickly into an area where UFOs were or are being sighted and obtain actual, real-time data does not appear likely to produce much. To

substantiate this conclusion, the UOC Committee cites the experience of NICAP teams of "eager amateurs" armed with cameras, magnetometers, and other specialized instrumentation who have gone instantly to sighting zones and attempted to obtain actual data. Despite their zeal, these teams apparently have never been able to obtain actual, real-time data. The conclusion, therefore, is that the UOC Committee will have to work with data that are available (i.e., reports from those who have sighted UFOs) and attempt to interpret those data so as to obtain a better understanding of UFOs.

5. Although the UOC Committee will deal primarily with data from reports, this will not preclude some team investigations of current sightings of special interest. Primary and back-up teams each consisting of two members (a physical scientist and a social scientist) are now being equipped with suitable instruments (i.e., Gieger counters, binoculars, cameras, maps, almanacs, etc.). These teams will be on stand-by alert at Colorado to investigate sightings of special interest. One unresolved question is how to determine which sightings to investigate. These teams will not be decentralized because the transportation from Denver to any part of the United States is adequate. After listening to this briefing, one cannot avoid the conclusion that the actual field investigations will be low priority items and will be played in low key during this investigation.

6. Discussion on the teams' activities led to another question basic to the Air Force approach to the UFO problem and one that the UOC Committee hopes to provide answers to--is a large field organization composed of an investigating officer at each Air Force base worthwhile? If such a system does not produce worthwhile, tangible results then the Air Force does not need it. If such a system does produce results then perhaps the Air Force needs to refine its reporting and investigating procedures, i.e., Project Blue Book and AFR 80-17. The Committee has developed an improved reporting form in consultation with psychologists to be used to obtain data from future sightings. Project Blue Book might find this useful.

7. Some interesting aspects of the UOC Committee's approach to the investigation are:

a. An attempt will be made to establish reliability of the reports and/or reporters. UOC wants to know how many are reliable, how many are accurate.

b. The Committee will assume some hypothesis that UFOs may exist. They will then try to determine how much evidence supports the probability or improbability of this hypothesis. Thus far the best hypothesis that UFOs exist appears to be the one proposed by Mr. Richard Hall, Deputy Director of NICAP. His is an active hypothesis whereas McDonald's is passive. According to the Committee, Hall definitely believes UFOs exist and are extra-terrestrial, solid objects. McDonald also believes they exist and are of extra-terrestrial origin but arrives at his conclusion

"by remainder" after eliminating all other possibilities of terrestrial and divine origin and leaving extra-terrestrial as the only alternative. At this time, the UOC Committee apparently favors the Hall hypothesis.

c. Data from sightings are being put on punch cards. The coding system can be expanded up to 50 cards per sighting. All reports of sightings after 1 January 1967 are being computerized. For cases prior to 1967, the Committee asked NICAP to pick out cases they believe should be included in the computer analysis part of the investigation. When questioned as to why NICAP was solicited as a source, the Committee stated that if their report is to have any credibility then NICAP would have to be involved in one form or another. I am inclined to agree with their viewpoint.

8. There will be 21 senior scientists associated with the UOC project.

9. In my opinion, one of the most interesting and potentially beneficial facets of the Committee's investigations is the sub-contracts with various agencies and individuals (i.e., SRI, Ford, RAND, NCAR, etc.) to study such phenomena as illumination, visual perception, fireballs, radiochemistry, ball lightning, etc., as they apply to UFOs.

10. CONCLUSIONS: After listening to the UOC briefing and discussing the matter informally with others, I do not believe the SAB Ad Hoc Committee should pursue this matter further at this time. The UOC Committee seems to have a fairly good grasp of the problem, and I do not see what useful purpose the SAB Committee can serve. Later in the calendar year after the UOC Committee has gained experience and analyzed some data, it might be useful for us to convene at Boulder for a series of formal briefings on the results and scope of the investigation. I can see a useful purpose for such a meeting. Since in a sense the UOC Committee is a brainchild of the SAB, the SAB Ad Hoc Committee could review the UOC Committee's progress and serve as a useful "devil's advocate" or sounding board to help establish credibility. The SAB could also suggest new directions where warranted. This type of SAB action would, of course, have to be done with the sanction of Dr. Stever, OSR, and Dr. Condon.



HAROLD A. STEINER, Lt Colonel, USAF
Assistant Executive Secretary
USAF Scientific Advisory Board

2 Atch

1. Comments by UOC Committee
2. Progress Report

MEMORANDUM FOR RECORD

10 August 1966

SUBJECT: Visit by Mr. William P. Wietzel, NICAP

1. Today I was visited by Mr. William Wietzel, an investigator for the National Investigating Committee on Aerial Phenomena. Mr. Wietzel did not have an appointment but just dropped in, presumably to discuss the report of the SAB Ad Hoc Committee to Review Project "Blue Book." This we did; however, the discussion soon deteriorated to an indictment of the way in which Major Quintella had handled the Ravenna, Ohio, UFO siting in April 1966. With regard to this particular siting, the main criticism of Major Quintella seems to be that his interviews with the people who had sited the UFO were restricted to about three minutes each via the telephone. However, in all fairness, it should be pointed out that Major Quintella did visit the scene of the Ravenna siting at a later date.
2. I neither concurred with Mr. Wietzel's opinion of Major Quintella nor did I defend Major Quintella strongly. I did point out that, hopefully, the university teams now being formed will provide scientific information that can eliminate the type of personality conflict that apparently exists between NICAP and Major Quintella.
3. There was some additional discussion of the pertinent information concerning the Ravenna siting of which Mr. Wietzel was a principal NICAP investigator. He has completed a lengthy and voluminous report of this siting that is impressive in size if not in content. I asked Mr. Wietzel if NICAP investigated every UFO siting as thoroughly as they had apparently investigated this one. The obvious answer was no because NICAP has limited resources. I then pointed out that the Air Force also has limited resources and cannot spend as much time on each UFO siting as it would like. We parted amiably at an impasse. He did not convince me, and I certainly did not convince him.

HAS
HAROLD A. STEINER, Lt Colonel, USAF
Assistant Secretary
USAF Scientific Advisory Board

The Committee agreed that the present "Blue Book" program is all right as far as it goes but that it is not investigative enough to satisfy the inquisitive scientific mind. The Air Force has been collecting UFO data for about 18 years but this data is no good for forming a scientific or technical background on UFO.[?] It appears that this program, as presently constituted, could go on ad infinitum without making a substantial contribution on whether there are or are not UFOs. Therefore, if anything constructive is going to happen, the time has apparently come to change from an operational approach to a scientific type of approach.

During the 18 years that the Air Force has been collecting data on UFO sightings, members of Moon Watch Teams and amateur astronomers, who were pursuing rigorous meteor sighting programs, have continuously scanned large areas of the night sky to obtain scientific and technical information on natural phenomena. To the best of the Committee's knowledge none of these observers with a scientific and technical background have ever sighted a UFO. The obvious conclusion is that when the sky is observed by scientifically-trained or scientifically-oriented personnel, UFOs are not observed. Therefore it is highly unlikely (or put another way, there is a very low probability) that the UFOs that are sighted and unidentified would remain unidentified

*Verbatim
comments
taken
at meeting
JCS*

if the incidents were subject to close scientific scrutiny.

(Source: Dr. Porter)

- - - - -

Along with the scientific approach the Air Force should conduct some unannounced controlled experiments to check out the techniques. It would also be useful to correlate known natural phenomena that can be predicted, i.e., comets, balloons, SAC refueling, etc., to check out sighting psychology and investigative techniques. (Source: Dr. Sagan)

- - - - -

The Committee should recommend that statistical analyses be made on UFO data. (Sagan)

- - - - -

The Committee should also recommend that in the event our major recommendations are not bought by the Air Force, the present "Blue Book" investigations be more thorough. For example, the B-47 sighting in New Hampshire were assumed to be the source of the UFO. However, no attempt was made to correlate the time of sighting or place of sighting with the navigation logs of any of the B-47s that were supposed to be in the area. Such a loose approach seriously degrades the "Project Blue Book" efforts and leaves loop holes that critics of the Air Forces handling of the UFO problem can use to cast doubt on the Air Force's credibility. (Sagan)

- - - - -

It would be useful to know how many times SPADATS sights unidentified objects with their radar. Is this number small or large? In either case, it means something different. If the number is large then this gives emphasis to the supposition that there are a large number of potential UFOs in the atmosphere. If the number is significantly small then because SPADATS is continuously scanning the skys, this lends credance to the supposition that UFOs are figments of emotional peoples imaginations.

- - - - -

A short review of the findings of the scientific groups who have worked on the UFO problem should be made available so that any new effort undertaken does not have to discover the wheel all over again. (Carter)

- - - - -

The Air Force should perhaps send letters to local police departments or, better still, when appropriate give a short briefing to police agencies asking for their responsible cooperation in the "Project Blue Book" effort. Undoubtedly, this would cause the number of sightings to rise because of the emotional response of the public. However, local police usually have a good public image so their value in helping the Air Force improve its statue should be weighed in light

of the probable increased number of sightings. Also such an approach would give ammunition for the critics to chide the Air Force for belately recognizing a problem that they (the so called "flying saucer buffs") have known about for years. In any case, press releases and public relations would have to be handled in an extremely skillful manner.

- - - - -

Dr. Caccioppo commented that any requirement for increased resources to study the UFO problem might cause DIA to recommend cancelation of the whole UFO project in their next budget review.

- - - - -

From my rough notes I gather that the Committee finally decided to recommend that the Air Force form teams at universities located strategically around the country. These teams would work closely with the local Air Force representative from the nearest Air Force Base to investigate UFOs. The Group would investigate only those UFO sightings that do not lend themselves to rapid and positive identification. The teams would be made up of at least one psychologist, who has had interview experience, and one or more physical scientists (astronomers, physicists, etc.).

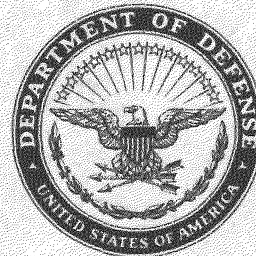
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The capability of the Air Force representative was also discussed and it was generally agreed that it would be wise to have someone with investigative ability and a modicum of technical experience as the UFO Project Officer at each Air Force Base.

The local representative of the Air Force Office of Special Investigations (OSI) may be a logical choice to work with the university groups when necessary. Each university would be assigned a specific geographic area. A lead university or FTD would analyze the data.

It is estimated that there will probably be ~~more~~ less than 100-150 sightings per year that will have to be investigated by the university teams. These will probably be randomly spread over the whole US so that no one university will be over burdened with UFO investigations.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, D.C.



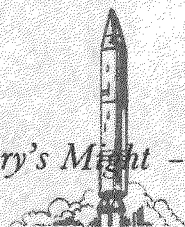
REPLY TO
ATTN OF:

21 January 1966

SUBJECT: Some SAFOI Thoughts for the SAB Ad Hoc Committee on UFOs

TO: RECORD

1. On 21 January, I visited SAFOI and discussed the Air Force's concern over the UFO problem with Lt Col John P. Spaulding and Mrs. Sarah Hunt (4a 120 - 79079).
2. SAFOI gets many inquiries concerning the UFO problem. Last year they received and answered more than 3300 letters on UFOs including many from the President and the Congress. The problem essentially boils down to one that is typified by the question, "When did you stop beating your wife?" Any answer the Air Force gives tends to incriminate the Air Force as a concealer of information and at the very least detracts from its image. SAFOI has to cope with this public relations problem and wants something done about it. Therefore they have turned to the SAB.
3. The last time that a group of scientists looked into the scientific aspects of the UFO problem was in 1953. Attachment 1 is a copy of that report.
4. Basically the question is this--is there any such thing as a UFO? When the Air Force receives information on a UFO sighting they have several options open to them. First, they can categorically deny that there is anything such as a UFO. Second, they can cast reflections on the sighters mental ability or claim that he is trying to perpetrate a hoax on the country. Third, they can investigate the sighting as well as possible with their limited resources (3 men at FTD) and admit that the AF is looking into the matter. Obviously, options one and two offer no solution. Thus, SAFOI has to rely on option three, and go through the normal sighting investigation (Attachment 2) that leads to admissions that there are a certain percentage of UFO sightings that the Air Force cannot identify. This approach keeps people like Fuller (see Saturday Review article, Attachment 3) and Major Kehoe in business because it provides them with continuous ammunition and the AF has no rejoinder.



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5. SAFOI wants some prestigious scientific group to look at the UFO problem in depth and come up with a position that will help get the Air Force off the hook. SAFOI expects to gain a report that will permit them to stand before the most reknown critics and say that the AF position on UFOs is sound or action is being taken to make it sound.

6. The questions that SAFOI wants answered are typically as follows:

- a. Is Project Blue Book adequate?
- b. Is there or is there not scientific evidence that UFOs exist?
- c. What can be done to make the Air Force position credible?

7. SAFOI claims, and rightly so, that they cannot get to the heart of the public relations problem until they get some scientific evidence upon which to base their opinion. For this reason they are very emphatic that they do not want a "for motherhood and against sin" type of committee report. As far as SAFOI is concerned the problem is critical.

8. As evidenced by the Fuller article in the Saturday Review (which is a prestigious news media that is read by highly influential people both in and out of government), the level of criticism of the Air Force is getting on a higher and higher plane. The recent Wall Street Journal article is another example of Air Force criticism appearing in a high-class news media. SAFOI clearly defined the criticality of the problem when they concluded by saying that none of the current Air Force problems, such as sonic boom, supersonic transport, and integration, etc., have created the poor public image for the Air Force that the UFO problem does.

Hal

HAROLD A. STEINER, Major, USAF
Assistant Secretary
USAF Scientific Advisory Board

- 3 Atch
- 1. UFO Report
 - 2. FTD Form 164
 - 3. Sat Review Article

~~SECRET~~

UNCLASSIFIED

REPORT OF MEETINGS OF SCIENTIFIC ADVISORY PANEL
ON UNIDENTIFIED FLYING OBJECTS

January 14 - 18, 1953

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HEADQUARTERS UNITED STATES AIR FORCE
USAF SCIENTIFIC ADVISORY BOARD
OFFICE OF THE SECRETARY OF THE AIR FORCE & CHIEF OF STAFF

DATE 3 May 67

MEMO FOR:

Sal -

This is an interesting paper! Much of what is recommended is still applicable today, so one gets the impression that ATIC-or FTD- did not heed the warning of increasing public concern for UFOs fanned by periodic stimulation by publicity-seeking individuals. Little progress has been made since this report in dispelling the public fears of UFOs. In fact most of the recent publicity, I feel, has done just the opposite by "fanning the smoldering flames."

I think a strong point in this question is the fact that in all the years that UFOs have been in the public scene there never has been any "hardware" evidence acquired. Unless the "little green men" are really super intellectuals engineering wise I feel that one of their craft

would have experienced some sort of difficulty causing an abort or crash, or something.

Also, we hear mostly - if not wholly - of sightings only in the U.S. or No. American continent. Do you know what the foreign "sighting" data looks like. Was this considered by or briefed to the O'Brien committee.

BB.

HEADQUARTERS UNITED STATES AIR FORCE
USAF SCIENTIFIC ADVISORY BOARD
OFFICE OF THE SECRETARY OF THE AIR FORCE & CHIEF OF STAFF

DATE 1 May 67

MEMO FOR:

Col Burger

Attached is an
Unclassified version of
the ^{report of the} CIA sponsored
Scientific Advisory Panel
on UFO's. Only the
names have been changed
to protect the guilty

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Return →

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UNCLASSIFIED

16 February 1953

MEMORANDUM FOR:

FROM :

SUBJECT : Report of Meetings of the
Scientific Advisory Panel on
Unidentified Flying Objects, January 14 - 18, 1953

PURPOSE

The purpose of this memorandum is to present:

- a. A brief history of the meetings of the Advisory Panel
On Unidentified Flying Objects (Part I),
- b. An unofficial supplement to the official Panel Report:
setting forth comments and suggestions of the Panel
Members which they believed were inappropriate for inclusion
in the formal report (Part II).

PART I: HISTORY OF MEETINGS

GENERAL

After consideration of the subject of "unidentified flying
objects" at the 4 December meeting of the

the following action was agreed:

"The will:

- a. Enlist the services of selected scientists to
review and appraise the available evidence in the
light of pertinent scientific theories...."

Following the delegation of this action to the

and preliminary investigation,

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UNCLASSIFIED

an Advisory Panel of selected scientists was assembled. In cooperation with the Air Technical Intelligence Center, case histories of reported sightings and related material were made available for their study and consideration.

Present at the initial meeting (0930 Wednesday, 14 January) were: Dr. H. P. Robertson, Dr. } Dr. Thornton
Page, Dr. Samuel A. Goudsmit,

, and the writer. Panel Member, Dr. Lloyd V. Berkner, was absent until Friday afternoon. Messrs.

were present throughout the sessions to familiarize themselves with the subject, represent the substantive interest of their Divisions, and assist in administrative support of the meetings. (A list of personnel concerned with the meetings is given in Tab A.

WEDNESDAY MORNING

The opened the meeting, reviewing CIA interest in the subject and action taken. This review included the mention of the Study Group of August 1952 culminating in the briefing of the the ATIC November 21 briefing, 4 December, consideration, visit to ATIC Robertson and, and concern over potential dangers to national security indirectly related to these sightings. Mr. enumerated these potential dangers. Following this introduction, Dr. turned the meeting over to

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Dr. Robertson as Chairman of the Panel. Dr. Robertson enumerated the evidence available and requested consideration of specific reports and letters be taken by certain individuals present (Tab B). For example, case histories involving radar or radar and visual sightings were selected for Dr. [] while reports of Green Fireball phenomena, nocturnal lights, and suggested programs of investigation were routed to Dr. Page. Following these remarks, the motion pictures of the sightings at Tremonton, Utah (2 July 1952) and Great Falls, Montana (15 August 1950) were shown. The meeting adjourned at 1200.

WEDNESDAY AFTERNOON

The second meeting of the Panel opened at 1400. Lt. [] USN, and Mr. [] of the USN Photo Interpretation Laboratory, Anacostia, presented the results of their analyses of the films mentioned above. This analysis evoked considerable discussion as elaborated upon below. Besides Panel members and CIA personnel, Capt. E. J. Ruppelt, Dr. [] (2-a-2), and Dr. [] were present.

Following the Photo Interpretation Lab presentation, Mr. E. J. Ruppelt spoke for about 40 minutes on ATIC methods of handling and evaluating reports of sightings and their efforts to improve the quality of reports. The meeting was adjourned at 1715.

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THURSDAY MORNING

The third and fourth meetings of the Panel were held Thursday, 15 January, commencing at 0900 with a two-hour break for luncheon. Besides Panel members and CIA personnel, Mr. Ruppelt and Dr. [redacted] were present for both sessions. In the morning, Mr. Ruppelt continued his briefing on ATIC collection and analysis procedures. The Project STORK support at [redacted] was described by Dr. [redacted]. A number of case histories were discussed in detail and a motion picture film of seagulls was shown. A two hour break for lunch was taken at 1200.

THURSDAY AFTERNOON

At 1400 hours [redacted] gave a 40-minute briefing of Project TWINKLE, the investigatory project conducted by the Air Force Meteorological Research Center at Cambridge, Mass. In this briefing he pointed out the many problems of setting up and manning 24-hour instrumentation watches of patrol cameras searching for sightings of U.F.O.'s.

At 1615 [redacted] joined the meeting with [redacted] expressed his support of the Panel's efforts and stated three personal opinions:

- a. That greater use of Air Force intelligence officers in the field (for follow-up investigation) appeared desirable. but that they required thorough briefing.

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- b. That vigorous effort should be made to declassify as many of the reports as possible.
- c. That some increase in the ATIC section devoted to U.F.O. analysis was indicated.

This meeting was adjourned at 1700.

FRIDAY MORNING

The fifth session of the Panel convened at 0900 with the same personnel present as enumerated for Thursday (with the exception of _____)

From 0900 - 1000 there was general discussion and study of reference material. Also, _____ read a prepared paper making certain observations and conclusions. At 1000 _____ gave a briefing on his fifteen months experience in Washington as Project Officer for U.F.O.'s and his personal conclusions. There was considerable discussion of individual case histories of sightings to which he referred. Following _____ presentation, a number of additional case histories were examined and discussed with Messrs. _____ Ruppelt, and _____ The meeting adjourned at 1200 for luncheon.

FRIDAY AFTERNOON

This session opened at 1400. Besides Panel members and CIA personnel, Dr. _____ was present. Dr. Lloyd V. Berkner, as Panel Member, was present at this meeting for the first time. Progress of the meetings was reviewed by the Panel Chairman and tentative

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conclusions reached. A general discussion followed and tentative recommendations considered. It was agreed that the Chairman should draft a report of the Panel to _____ that evening for review by the Panel the next morning. The meeting adjourned at 1715.

SATURDAY MORNING

At 0945 the Chairman opened the seventh session and submitted a rough draft of the Panel Report to the members. This draft had been reviewed and approved earlier by Dr. Berkner. The next two and one-half hours were consumed in discussion and revision of the draft. At 1100 the _____ joined the meeting and reported that he had shown and discussed a copy of the initial rough draft to the Director of Intelligence, USAF, whose reaction was favorable. At 1200 the meeting was adjourned.

SATURDAY AFTERNOON

At 1400 the eighth and final meeting of the Panel was opened. Discussion and rewording of certain sentences of the Report occupied the first hours. (A copy of the final report is appended as Tab C.) This was followed by a review of work accomplished by the Panel and restatement of individual Panel Member's opinions and suggestions on details that were felt inappropriate for inclusion in the formal report. It was agreed that the writer would incorporate these comments in an internal report to the _____. The material below represents this information.

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PART II: COMMENTS AND SUGGESTIONS OF PANEL

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GENERAL

The Panel Members were impressed (as have been others, including _____ personnel) in the lack of sound data in the great majority of case histories; also, in the lack of speedy follow-up due primarily to the modest size and limited facilities of the ATIC section concerned. Among the case histories of significant sightings discussed in detail were the following:

Bellefontaine, Ohio (1 August 1952); Tremonton, Utah (2 July 1952); Great Falls, Montana (15 August 1950); Yaak, Montana (1 September 1952); Washington, D. C. area (19 July 1952); and Haneda A.F.B., Japan (5 August 1952), Port Huron, Michigan (29 July 1952); and Presque Isle, Maine (10 October 1952).

After review and discussion of these cases (and about 15 others, in less detail), the Panel concluded that reasonable explanations could be suggested for most sightings and "by deduction and scientific method it could be induced (given additional data) that other cases might be explained in a similar manner". The Panel pointed out that because of the brevity of some sightings (e.g. 2-3 seconds) and the inability of the witnesses to express themselves clearly (semantics) that conclusive explanations could not be expected for every case reported. Furthermore, it was considered that, normally, it would be a great waste of effort to try to solve most of the sightings, unless such action would benefit a training and educational program (see below). The writings of Charles Fort were referenced to show

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that "strange things in the sky" had been recorded for hundreds of years. It appeared obvious that there was no single explanation for a majority of the things seen. The presence of radar and astronomical specialists on the Panel proved of value at once in their confident recognition of phenomena related to their fields. It was apparent that specialists in such additional fields as psychology, meteorology, aerodynamics, ornithology and military air operations would extend the ability of the Panel to recognize many more categories of little-known phenomena.

ON LACK OF DANGER

The Panel concluded unanimously that there was no evidence of a direct threat to national security in the objects sighted. Instances of "Foo Fighters" were cited. These were unexplained phenomena sighted by aircraft pilots during World War II in both European and Far East theaters of operation wherein "balls of light" would fly near or with the aircraft and maneuver rapidly. They were believed to be electrostatic (similar to St. Elmo's fire) or electromagnetic phenomena or possibly light reflections from ice crystals in the air, but their exact cause or nature was never defined. Both Robertson and _____ had been concerned in the investigation of these phenomena, but David T. Griggs (Professor of Geophysics at the University of California at Los Angeles) is believed to have been the most knowledgeable person on this subject. If the term "flying saucers" had been popular in 1943 - 1945, these objects would

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have been so labeled. It was interesting that in at least two cases reviewed that the object sighted was categorized by Robertson and [] as probably "Foo Fighters", to date unexplained but not dangerous; they were not happy thus to dismiss the sightings by calling them names. It was their feeling that these phenomena are not beyond the domain of present knowledge of physical sciences, however.

AIR FORCE REPORTING SYSTEM

It was the Panel's opinion that some of the Air Force concern over U.F.O.'s (notwithstanding Air Defense Command anxiety over fast radar tracks) was probably caused by public pressure. The result today is that the Air Force has instituted a fine channel for receiving reports of nearly anything anyone sees in the sky and fails to understand. This has been particularly encouraged in popular articles on this and other subjects, such as space travel and science fiction. The result is the mass receipt of low-grade reports which tend to overload channels of communication with material quite irrelevant to hostile objects that might some day appear. The Panel agreed generally that this mass of poor-quality reports containing little, if any, scientific data was of no value. Quite the opposite, it was possibly dangerous in having a military service foster public concern in "nocturnal meandering lights". The implication being, since the interested agency was military, that these objects were or might be potential direct threats to national security. Accordingly, the need for deemphasization made itself apparent. Comments on a possible educational program are enumerated below.

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It was the opinion of Dr. Robertson that the "saucer" problem had been found to be different in nature from the detection and investigation of German V-1 and V-2 guided missiles prior to their operational use in World War II. In this 1943-1944 intelligence operation (CROSSBOW), there was excellent intelligence and by June 1944 there was material evidence of the existence of "hardware" obtained from crashed vehicles in Sweden. This evidence gave the investigating team a basis upon which to operate. The absence of any "hardware" resulting from unexplained U.F.O. sightings lends a "will-of-the-wisp" nature to the ATIC problem. The results of their investigation, to date, strongly indicate that no evidence of hostile act or danger exists. Furthermore, the current reporting system would have little value in the case of detection of enemy attack by conventional aircraft or guided missiles; under such conditions "hardware" would be available almost at once.

ARTIFACTS OF EXTRATERRESTRIAL ORIGIN

It was interesting to note that none of the members of the Panel were loath to accept that this earth might be visited by extra-terrestrial intelligent beings of some sort, some day. What they did not find was any evidence that related the objects sighted to space travelers. Mr. [REDACTED], in his presentation, showed how he had eliminated each of the known and probable causes of sightings leaving him "extra-terrestrial" as the only one remaining in many cases. [REDACTED]'s background as an aeronautical engineer and technical intelligence

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officer (Project Officer, BLUEBOOK for 15 months) could not be slighted. However, the Panel could not accept any of the cases cited by him because they were raw, unevaluated reports.

Terrestrial explanations of the sightings were suggested in some cases and in others the time of sighting was so short as to cause suspicion of visual impressions. It was noted by Dr. Goudsmit and others that extraterrestrial artifacts, if they did exist, are no cause for alarm; rather, they are in the realm of natural phenomena subject to scientific study, just as cosmic rays were at the time of their discovery 20 to 30 years ago. This was an attitude in which Dr. Robertson did not concur, as he felt that such artifacts would be of immediate and great concern not only to the U. S. but to all countries. (Nothing like a common threat to unite peoples!) Dr. Page noted that present astronomical knowledge of the solar system makes the existence of intelligent beings (as we know the term) elsewhere than on the earth extremely unlikely, and the concentration of their attention by any controllable means confined to any one continent of the earth quite preposterous.

TREMONTON, UTAH, SIGHTING

This case was considered significant because of the excellent documentary evidence in the form of Kodachrome motion picture films (about 1600 frames). The Panel studied these films, the case history, ATIC's interpretation, and received a briefing by representatives of the USN Photo Interpretation Laboratory on their analysis of the film. This team had expended (at Air Force request) approximately

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1000 man-hours of professional and sub-professional time in the preparation of graph plots of individual frames of the film, showing apparent and relative motion of objects and variation in their light intensity. It was the opinion of the P.I.L. representatives that the objects sighted were not birds, balloons or aircraft, were "not reflections because there was no blinking while passing through 60° of arc" and were, therefore, "self-luminous". Plots of motion and variation in light intensity of the objects were displayed. While the Panel Members were impressed by the evident enthusiasm, industry and extent of effort of the P.I.L. team, they could not accept the conclusions reached. Some of the reasons for this were as follows:

- a. A semi-spherical object can readily produce a reflection of sunlight without "blinking" through 60° of arc travel.
- b. Although no data was available on the "albedo" of birds or polyethylene balloons in bright sunlight, the apparent motions, sizes and brightnesses of the objects were considered strongly to suggest birds, particularly after the Panel viewed a short film showing high reflectivity of seagulls in bright sunlight.
- c. P.I.L. description of the objects sighted as "circular, bluish-white" in color would be expected in cases of specular reflections of sunlight from convex surfaces where the brilliance of the reflection would obscure other portions of the object.

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- d. Objects in the Great Falls case were believed to have probably been aircraft, and the bright lights such reflections.
- e. There was no valid reason for the attempt to relate the objects in the Tremonton sighting to those in the Great Falls sighting. This may have been due to misunderstanding in their directive. The objects in the Great Falls sighting are strongly suspected of being reflections of aircraft known to have been in the area.
- f. The intensity change in the Tremonton lights was too great for acceptance of the P.I.L. hypothesis that the apparent motion and changing intensity of the lights indicated extremely high speed in small orbital paths.
- g. Apparent lack of guidance of investigators by those familiar with U.F.O. reports and explanations.
- h. Analysis of light intensity of objects made from duplicate rather than original film. The original film was noted to have a much lighter background (affecting relative brightness of object) and the objects appeared much less bright.
- i. Method of obtaining data of light intensity appeared faulty because of unsuitability of equipment and questionable assumptions in making averages of readings.
- j. No data had been obtained on the sensitivity of Kodachrome film to light of various intensities using the same camera type at the same lens openings.

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k. Hand "jitter" frequencies (obtainable from early part of Tremonton film) were not removed from the plots of the "single pass plots" at the end of the film.

The Panel believed strongly that the data available on this sighting was sufficient for positive identification if further data is obtained by photographing polyethylene "pillow" balloons released near the site under similar weather conditions, checking bird flight and reflection characteristics with competent ornithologists and calculating apparent "G" forces acting upon objects from their apparent tracks. It was concluded that the results of such tests would probably lead to creditable explanations of value in an educational or training program. However, the Panel noted that the cost in technical manpower effort required to follow up and explain every one of the thousand or more reports received through channels each year (1,900 in 1952) could not be justified. It was felt that there will always be sightings, for which complete data is lacking, that can only be explained with disproportionate effort and with a long time delay, if at all. The long delay in explaining a sighting tends to eliminate any intelligence value. The educational or training program should have as a major purpose the elimination of popular feeling that every sighting, no matter how poor the data, must be explained in detail. Attention should be directed to the requirement among scientists that a new phenomena, to be accepted, must be completely and convincingly documented. In other words, the burden of proof is on the sighter, not the explainer.

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POTENTIAL RELATED DANGERS

The Panel Members were in agreement with _____ opinion that, although evidence of any direct threat from these sightings was wholly lacking, related dangers might well exist resulting from:

- a. Misidentification of actual enemy artifacts by defense personnel.
- b. Overloading of emergency reporting channels with "false" information ("noise to signal ratio" analogy - Berkner).
- c. Subjectivity of public to mass hysteria and greater vulnerability to possible enemy psychological warfare.

Although not the concern of CIA, the first two of these problems may seriously affect the Air Defense intelligence system, and should be studied by experts, possibly under ADC. If U.F.O.'s become discredited in a reaction to the "flying saucer" scare, or if reporting channels are saturated with false and poorly documented reports, our capability of detecting hostile activity will be reduced.

Dr. Page noted that more competent screening or filtering of reported sightings at or near the source is required, and that this can best be accomplished by an educational program.

GEOGRAPHIC LOCATIONS OF UNEXPLAINED SIGHTINGS

The map prepared by ATIC showing geographic locations of officially reported unexplained sightings (1952 only) was examined by the Panel. This map showed clusters in certain strategic areas such as Los Alamos. This might be explained on the basis of 24-hour watchful guard and

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awareness of security measures near such locations. On the other hand, there had been no sightings in the vicinity of sensitive related AE establishments while there were occasionally multiple cases of unexplained sightings in non-strategic areas. Furthermore, there appeared to be no logical relationship to population centers. The Panel could find no ready explanation for these clusters. It was noted, however, that if terrestrial artifacts were to be observed it would be likely that they would be seen first near foreign areas rather than central U. S.

INSTRUMENTATION TO OBTAIN DATA

The Panel was of the opinion that the present ATIC program to place 100 inexpensive 35 mm. stereo cameras in the hands of various airport control tower operators would probably produce little valuable data related to U.F.O.'s. However, it was recognized that such action would tend to allay public concern in the subject until an educational program had taken effect. It was believed that procurement of these cameras was partly the result of public pressure in July 1952. With the poor results of the year-long Project TWINKLE program of 24-hours instrumentation watch (two frames of film showing nothing distinguishable), a widespread program of sky-watching would not be expected to yield much direct data of value.

There was considerable discussion of a possible "sky patrol" by amateur astronomers ~~_____~~ and by wide-angle cameras (Page). Dr. Page and Dr. Robertson pointed out that at present a considerable fraction

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of the sky is now--and has been for many years--under surveillance every clear night in several meteor and aurora observing programs as well as sky mapping programs at the various locations listed below. Although the attention of these astronomers is largely directed toward identified rather than unidentified objects, no case of any striking unidentified object is known to Dr. Page or Dr. [redacted] Such an object would most certainly be reported if found on patrol plates.

A case was cited where an astronomer refused to interrupt his exposure in order to photograph an alleged sighting in a different part of the sky. This led Dr. [redacted] to say that, if a program of watching could be an adjunct of planned astronomical programs, little cost would be involved and that the trained astronomical personnel might photograph a sighting of an unidentified object.

The location of some of these programs and their directors are believed to be:

- a. Harvard University, Cambridge and New Mexico (meteor patrol)--Whipple.
- b. Yerkes Observatory, University of Chicago and Fort Davis, Texas (several programs)--Meinel (auroras), Kuiper (asteroids), Morgan (wide angle camera).
- c. University of Alaska, Fairbanks (aurorae)--Elvey
- d. Dominion Observatory, Ottawa (meteors)--Millman
- e. Palomar Observatory, California (sky map)--Minkowski
- f. Lick Observatory, California (sky map)--Shane

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It was agreed by the Panel that no government-sponsored program of optical nation-wide sky patrol is worthwhile at the present time, and that the encouragement of amateur astronomers to undertake such a program might have the adverse effect of over-emphasizing "flying saucer" stories in the public mind. However, the issue of radar scope cameras for recording peculiar radar echoes would serve several purposes, including the better understanding of radar interference as well as identification of U.F.O.'s.

RADAR PROBLEM OF MUTUAL INTERFERENCE

This characteristic problem of radar operation wherein the pulse signal (of approximately the same frequency) from station A may be picked up on the screen of station B and show as a high-speed track or series of dots was recognized to have probably caused a number of U.F.O. reports. This problem was underlined by information received indicating ADC concern in solving this problem of signal identification before service use of very high-speed aircraft or guided missiles (1955-1956). Dr. Berkner believed that one answer to this problem was the use of a "doppler filter" in the receiving circuit. Dr. _____ suggested that the problem might be better solved by the use of a "controlled jitter" wherein the operator receiving "very fast tracks" (on the order of 1000- 10,000 m.p.h.) would operate a circuit which would alter slightly his station's pulse frequency rate. If the signal received on the screen had been caused by mutual interference with another station, the track would now show itself at a different distance

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from the center of the screen, if it still appeared at all. Dr. _____ felt such a technical solution was simpler and would cost much less than a "doppler filter".

UNEXPLAINED COSMIC RAY PHENOMENA

Two reported cases were examined: one at Palomar Mountain, California, in October 1949, when cosmic ray counters went "off scale for a few seconds", apparently while a "V" of flying saucers was observed visually; and two, a series of observations by the "Los Alamos Bird Watchers Association" from August 1950 to January 1951, when cosmic ray coincidence counters behaved queerly. Circuit diagrams and records were available for the latter, and Dr. _____ was able quickly to point out that the recorded data were undoubtedly due to instrumental effects that would have been recognized as such by more experienced observers.

The implication that radioactive effects were correlated with unidentified flying objects in these two cases was, therefore, rejected by the Panel.

EDUCATIONAL PROGRAM

The Panel's concept of a broad educational program integrating efforts of all concerned agencies was that it should have two major aims: training and "debunking".

The training aim would result in proper recognition of unusually illuminated objects (e.g., balloons, aircraft reflections) as well as natural phenomena (meteors, fireballs, mirages, noctilucent clouds). Both visual and radar recognition are concerned. There would be many

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levels in such education from enlisted personnel to command and research personnel. Relative emphasis and degree of explanation of different programs would correspond to the categories of duty (e.g., radar operators; pilots; control tower operators; Ground Observer Corps personnel; and officers and enlisted men in other categories.) This training should result in a marked reduction in reports caused by misidentification and resultant confusion.

The "debunking" aim would result in reduction in public interest in "flying saucers" which today evokes a strong psychological reaction. This education could be accomplished by mass media such as television, motion pictures, and popular articles. Basis of such education would be actual case histories which had been puzzling at first but later explained. As in the case of conjuring tricks, there is much less stimulation if the "secret" is known. Such a program should tend to reduce the current gullibility of the public and consequently their susceptibility to clever hostile propaganda. The Panel noted that the general absence of Russian propaganda based on a subject with so many obvious possibilities for exploitation might indicate a possible Russian official policy.

Members of the Panel had various suggestions related to the planning of such an educational program. It was felt strongly that psychologists familiar with mass psychology should advise on the nature and extent of the program. In this connection, Dr. Hadley Cantril (Princeton University) was suggested. Cantril authored "Invasion from

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Mars," (a study in the psychology of panic, written about the famous Orson Welles radio broadcast in 1938) and has since performed advanced laboratory studies in the field of perception. The names of Don Marquis (University of Michigan) and Lee Rosten were mentioned as possibly suitable as consultant psychologists. Also, someone familiar with mass communications techniques, perhaps an advertising expert, would be helpful. Arthur Godfrey was mentioned as possibly a valuable channel of communication reaching a mass audience of certain levels. Dr. Berkner suggested the U. S. Navy (ONR) Special Devices Center, Sands Point, L. I., as a potentially valuable organization to assist in such an educational program. The teaching techniques used by this agency for aircraft identification during the past war was cited as an example of a similar educational task. The Jam Handy Co. which made World War II training films (motion picture and slide strips) was also suggested, as well as Walt Disney, Inc. animated cartoons. Dr. suggested that the amateur astronomers in the U. S. might be a potential source of enthusiastic talent "to spread the gospel". It was believed that business clubs, high schools, colleges, and television stations would all be pleased to cooperate in the showing of documentary type motion pictures if prepared in an interesting manner. The use of true cases showing first the "mystery" and then the "explanation" would be forceful.

To plan and execute such a program, the Panel believed was no mean task. The current investigatory group at ATIC would, of necessity, have to be closely integrated for support with respect to not only the

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historical cases but the current ones. Recent cases are probably much more susceptible to explanation than older ones; first, because of ATIC's experience and, secondly, their knowledge of most plausible explanations. The Panel believed that some expansion of the ATIC effort would certainly be required to support such a program. It was believed inappropriate to state exactly how large a Table of Organization would be required. Captain Ruppelt of ATIC unofficially proposed, for purposes of analyzing and evaluating reports:

- a. An analysts' panel of four officers
- b. Four officer investigators
- c. A briefing officer
- d. An ADC liaison officer
- e. A weather and balloon data officer
- f. An astronomical consultant
- g. A group Leader, with administrative assistant, file clerks and stenographers.

This proposal met with generally favorable comment. The Panel believed that, with ATIC's support, the educational program of "training and debunking" outlined above might be required for a minimum of one and one-half to two years. At the end of this time, the dangers related to "flying saucers" should have been greatly reduced if not eliminated. Cooperation from other military services and agencies concerned (e.g., Federal Civil Defense Administration) would be a necessity. In investigating significant cases (such as the Tremonton, Utah, sighting), controlled experiments might be required. An example

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would be the photographing of "pillow balloons" at different distances under similar weather conditions at the site.

The help of one or two psychologists and writers and a subcontractor to produce training films would be necessary in addition. The Panel considered that ATIC's efforts, temporarily expanded as necessary, could be most useful in implementing any action taken as a result of its recommendations. Experience and records in ATIC would be of value in both the public educational and service training program envisaged. Dr. Robertson at least was of the opinion that after public gullibility lessened and the service organizations, such as ADC, had been trained to sift out the more readily explained spurious sightings, there would still be a role for a very modest-sized ATIC section to cope with the residuum of items of possible scientific intelligence value. This section should concentrate on energetically following up (perhaps on the advice of qualified Air Force Scientific Advisory Board members) those cases which seemed to indicate the evidence of unconventional enemy artifacts. Reports of such artifacts would be expected to arise mainly from Western outposts in far closer proximity to the Iron Curtain than Lubbock, Texas!

UNOFFICIAL INVESTIGATING GROUPS

The Panel took cognizance of the existence of such groups as the "Civilian Flying Saucer Investigators" (Los Angeles) and the "Aerial Phenomena Research Organization (Wisconsin)". It was believed that such organizations should be watched because of their potentially

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great influence on mass thinking if widespread sightings should occur.

The apparent irresponsibility and the possible use of such groups for subversive purposes should be kept in mind.

INCREASE IN NUMBER OF SIGHTINGS

The consensus of the Panel was, based upon the history of the subject, that the number of sightings could be reasonably expected to increase again this summer.

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TAB A

REPORT OF THE SCIENTIFIC PANEL
ON
UNIDENTIFIED FLYING OBJECTS

1. Pursuant to the request _____

_____, the undersigned Panel of Scientific Consultants has met to evaluate any possible threat to national security posed by Unidentified Flying Objects ("Flying Saucers"), and to make recommendations thereon. The Panel has received the evidence as presented by cognizant intelligence agencies, primarily the Air Technical Intelligence Center, and has reviewed a selection of the best documented incidents.

2. As a result of its considerations, the Panel concludes:

- a. That the evidence presented on Unidentified Flying Objects shows no indication that these phenomena constitute a direct physical threat to national security.

We firmly believe that there is no residuum of cases which indicates phenomena which are attributable to foreign artifacts capable of hostile acts, and that there is no evidence that the phenomena indicates a need for the revision of current scientific concepts.

3. The Panel further concludes:

- a. That the continued emphasis on the reporting of these phenomena does, in these parlous times, result in a threat to the orderly functioning of the protective organs of the body politic.

We cite as examples the clogging of channels of communication by irrelevant reports, the danger of being led by continued false alarms to ignore real

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indications of hostile action, and the cultivation of a morbid national psychology in which skillful hostile propaganda could induce hysterical behavior and harmful distrust of duly constituted authority.

4. In order most effectively to strengthen the national facilities for the timely recognition and the appropriate handling of true indications of hostile action, and to minimize the concomitant dangers alluded to above, the Panel recommends:

a. That the national security agencies take immediate steps to strip the Unidentified Flying Objects of the special status they have been given and the aura of mystery they have unfortunately acquired;

b. That the national security agencies institute policies on intelligence, training, and public education designed to prepare the material defenses and the morale of the country to recognize most promptly and to react most effectively to true indications of hostile intent or action.

We suggest that these aims may be achieved by an integrated program designed to reassure the public of the total lack of evidence of inimical forces behind the phenomena, to train personnel to recognize and reject false indications quickly and effectively, and to strengthen regular channels for the evaluation of and prompt reaction to true indications of hostile measures.

/s/ H. P. Robertson, Chairman
California Institute of Technology

/s/ Luis W. Alvarez
University of California

/s/ Lloyd V. Berkner
Associated Universities, Inc.

/s/ S. A. Goudsmit
Brookhaven National Laboratories

/s/ Thornton Page
Johns Hopkins University

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TAB B

SCIENTIFIC ADVISORY PANEL ON
UNIDENTIFIED FLYING OBJECTS

14 - 17 January 1953

EVIDENCE PRESENTED

1. Seventy-five case histories of sightings 1951 - 1952 (selected by ATIC as those best documented).
2. ATIC Status and Progress Reports of Project GRUDGE and Project BLUE BOOK (code names for ATIC study of subject).
3. Progress Reports of Project STORK _____
_____ contract work supporting ATIC).
4. Summary Report of Sightings at Holloman Air Force Base, New Mexico.
5. Report of USAF Research Center, Cambridge, Mass., Investigation of "Green Fireball" Phenomena (Project TWINKLE).
6. Outline of Investigation of U.F.O.'s Proposed by Kirtland Air Force Base (Project POUNCE).
7. Motion Picture Films of sightings at Tremonton, Utah, 2 July 1952 and Great Falls, Montana, August 1950.
8. Summary Report of 89 selected cases of sightings of various categories (Formations, Blinking Lights, Hovering, etc.).
9. Draft of manuel: "How to Make a FLYOBRPT", prepared at ATIC.
10. Chart Showing Plot of Geographic Location of Unexplained Sightings in the United States during 1952.
11. Chart Showing Balloon Launching Sites in the United States.
12. Charts Showing Selected Actual Balloon Flight Paths and Relation to Reported Sightings.
13. Charts Showing Frequency of Reports of Sightings, 1948 - 1952.
14. Charts Showing Categories of Explanations of Sightings.
15. Kodachrome Transparencies of Polyethylene Film Balloons in Bright Sunlight Showing High Reflectivity.

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TAB-B

16. Motion picture of seagulls in bright sunlight showing high reflectivity.
17. Intelligence Reports Relating to U.S.S.R. Interest in U. S. Sightings.
18. Samples of Official USAF Reporting Forms and Copies of Pertinent Air Force, Army and Navy Orders Relating to Subject.
19. Sample Polyethylene "Pillow" Balloon (54 inches square).
20. "Variations in Radar Coverage", JANP 101 (Manual illustrating unusual operating characteristics of Service radar).
21. Miscellaneous official letters and foreign intelligence reports dealing with subject.
22. Copies of popular published works dealing with subject (articles in periodicals, newspaper clippings and books).

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REPORT OF THE SCIENTIFIC PANEL
ON
UNIDENTIFIED FLYING OBJECTS

17 January 1953

1. The undersigned Panel of Scientific Consultants has met at the request of the Government to evaluate any possible threat to national security posed by Unidentified Flying Objects ("Flying Saucers"), and to make recommendation. The Panel has received the evidence as presented by cognizant Governmental agencies, primarily the United States Air Force, and has reviewed a selection of the best documented incidents.

2. As a result of its considerations, the Panel concludes:

That the evidence presented on Unidentified Flying Objects shows no indication that these phenomena constitute a direct physical threat to national security.

We firmly believe that there is no residuum of cases which indicates phenomena which are attributable to foreign artifacts capable of hostile acts, and that there is no evidence that the phenomena indicate a need for the revision of current scientific concepts.

3. In the light of this conclusion, the Panel recommends:

That the national security agencies take immediate steps to strip the Unidentified Flying Objects of the special status they have been given and the aura of mystery they have unfortunately acquired.

We suggest that this aim may be achieved by an integrated program designed to reassure the public of the total lack of evidence of inimical forces behind the phenomena.

/s/ Lloyd V. Berkner
Associated Universities, Inc.

/s/ H.P. Robertson, Chairman
California Institute of Technology

/s/ S. A. Goudsmit
Brookhaven National Laboratories

/s/ Luis W. Alvarez
University of California

/s/ Thornton Page
John Hopkins University

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Hold in
Compiled by Col Zubon, officer of
USAF Chief Scientist

REFERENCES ON UFO'S

A. PERIODICALS

- | | | | |
|---|-------------|---------------------|---------------------------|
| 1. Return of Flying Saucers | D. Cohen | NATION | Sep 13, 1965 |
| 2. Tradewinds; Report of a UFO in Exeter, N.H. | J.G. Fuller | Saturday Review | Oct 2, 1965 |
| 3. Tradewinds; Exeter People Give Accounts of Observations | J.G. Fuller | Saturday Review | Jan 22, 1966 |
| 4. Why I Believe in Flying Saucers | M. Kantor | Popular Science | Jan 1966 |
| 5. Fatuus Season: Ann Arbor and Hillsdale Sightings | | Time | April 1, 1966 |
| 6. Flying Saucers: Illusions or Reality? UFO's in Michigan | | U.S. News | Apr 4, 1966 |
| 7. Gullibility Experiment: Southern California | | Time | Apr 8, 1966 |
| 8. Hard Look at Flying Saucers: Questions and Answers | | U.S. News | Apr 11, 1966 |
| 9. Marsh Gas in Michigan; latest UFO incident | | America | Apr 9, 1966 |
| 10. Notes and Comment; Saucer Flap | | New Yorker | Apr 9, 1966 |
| 11. Outer-Space Ghost Story; Excerpt from Incident at Exeter | J.G. Fuller | Look Readers Digest | Feb 22, 1966
May, 1966 |
| 12. PI in the Sky; UFO's Michigan | | Newsweek | Apr 4, 1966 |
| 13. Tradewinds; USAF Reactions to Recent Sightings | J.G. Fuller | Sat. Review | Apr 16, 1966 |
| 14. Well-Witnessed Invasion by Something; Australia to Michigan | P. O'Neill | Life | Apr 1, 1966 |

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- | | | | | |
|-----|---|--------------------------|---------------------|--------------|
| 15. | Should We Be Serious About UFO's? Unidentified Flying Object | D. Cohen | Science Digest | June, 1965 |
| 16. | Ufology: New Report debunks belief that UFO's are buzzing the Earth | | Newsweek | Aug 5, 1963 |
| 17. | World of Flying Saucers | D.H. Menzel
L.G. Boyd | Science Digest | Sep, 1963 |
| 18. | Saucers, Pancakes and Such | | Science | Feb 16, 1962 |
| 19. | Afternoon with the Space People | H. Draper | Harper | Sep, 1960 |
| 20. | Flying Saucers | C.G. Jung | Sat.Review | Aug 8, 1959 |
| 21. | Bye on Space | D.Q. Posin | Pop.Mech. | Feb. 1960 |
| 22. | Out-of-the-Blue Believers
Civilian Saucer Intelligence of New York | | New Yorker | Apr 18, 1959 |
| 23. | Saucers Explained | | Science News Letter | Apr 30, 1960 |
| 24. | Saucery and Flying Saucers | D. Cort | Nation | Nov.7, 1959 |
| 25. | Theory about Flying Saucers | D.H. Robey | Sat.Review | Sep 5, 1959 |
| 26. | What's Up There? | A.C. Clarke | Holiday | March, 1959 |
| 27. | Cups or Saucers | | Time | Sep 9, 1957 |
| 28. | Dinner Time | | Time | Nov 18, 1957 |
| 29. | Dr. Jung and the Saucers | | Time | Aug 11, 1958 |
| 30. | Flying Saucers and Science | | American Mercury | July, 1957 |
| 31. | If You're Seeing Things in the Sky | | U.S. News | Nov 15, 1957 |
| 32. | No Evidence for Saucers | | Science News Letter | Nov 16, 1957 |
| 33. | Saucer Session for Spaceship Sighters: Interplanetary Spacecraft Convention | | Life | May 27, 1957 |

34.	Saucers and Smoking		Newsweek	Aug. 11, 1958
35.	Seeing Things		Newsweek	Nov. 18, 1957
36.	Skillie from the Sky		Newsweek	Nov. 25, 1957
37.	Slim Chance for Saucer Sightings		Science Digest	Feb. 1958
38.	Flying Saucer Conspiracy	D.E. Kohoe	Am. Mercury	Sep. 1956
39.	Flying Saucers, I've Seen	H.A. Shanklin	Flying	Sep. 1955
40.	From Saucers Investigation Group		Science Digest	Feb. 1957
41.	Great Saucer Hunt	S. Mandel	Sat. Review	Aug 6, 1955 Aug 27, 1955
42.	He runs Flying Saucer Headquarters	J. Kobler	Sat. Eve. Post	Mar. 10, 1956
43.	Inside Story of Saucers: Excerpt from Rpt on UFO's	E.J. Ruppelt	Science Digest	Apr. 1956
44.	Is this the real Flying Saucer	B. Kocivar	Look	June 14, 1955
45.	Latest on the Flying Saucer		Sat. Review	Feb 25, 1956
46.	Now you see 'em, now you don't		Espeigador Americas	Aug. 1955
47.	Saucer Blue Book		Time	Nov. 7, 1955
48.	Strange Shapes Seen in the Sky		Life	Dec. 5, 1955
49.	Unidentified Objects		Sky & Tel	Aug. 1956
50.	AF Looks at Saucers	A. Long	Science Digest	Jan. 1954
51.	ATIC Begins Study of Saucer Reports		Aviation Week	Oct. 19, 1953
52.	Biblical Flying Saucers		Sc. News Letter	Mar. 7, 1953

53.	Canada's Flying Saucer Lookout Lab	E. Griffin	Science Digest	Feb. 1954
54.	Finds Saucers Exist Solely in Imagination		Science Digest	Jan. 1955
55.	Waiting for the Little Men		Newsweek	Mar 28, '55
56.	Flying Saucers from Outer Space; Excerpts	D. E. Kehoe	Look	Oct 20, '53 Dec 1, '53
57.	Letter from Paris	Genet	New Yorker	Oct 23, '54
58.	Now They're in Italy; Astral Intruders		Life	Nov 29, '54
59.	Of Spots Before the Eyes	E. F. Mauer	Science	Dec 19, '52 Jan 31, '53
60.	On the Flying Saucer Trail		Am. Mag.	Apr. '54
61.	Plenty Going on in the Skys		U.S. News	Jan. 1, 1954
62.	Report on our Flying Saucer Balloons	C. Knight	Colliers	Jun 11, '54
63.	Saucers on Radar?	D. H. Menzel	Pop. Sci.	Apr. 1953
64.	Those Flying Saucers	C. C. Wylie	Science	Jul 31, '53 Dec 11, '53
65.	To Our Readers	M. Straight	New Republic	Oct 26, '53
66.	Flying Saucers and Book Selection (Biblio)	H. J. Crum	Library	Oct. 1, '54 Feb. 1, '55
67.	AF US Saucers	B. S. Lee	Aviation Week	Jun 23, '52
68.	Another Saucer Mystery	L. W. Vinther	Flying	June, 1951
69.	Blips on the Scopes		Time	Aug. 4, '52
70.	Cause of Flying Saucers		Sc NL	Aug. 9, '52
71.	Flying Saucer Hoax	V. Black	Am. Mercury	Oct. '52 Jan. '53
72.	Flying Saucer Hoax	R. Gelatt	Sat. Review	Dec. 6, '52
73.	Flying Saucers are Old Stuff		Pop. Sci.	May, 1952

- | | | | | |
|-----|---|--------------------------|------------------------|--------------------------|
| 74. | Flying Saucers: Myth or Menace? Pic Story | L. Elliott | Coronet | Nov. 1952 |
| 75. | Flying Saucers, New in Name Only | J.R. Aswell | Readers Digest | July, 1952 |
| 76. | Hollywood Builds Flying Saucers | | Popl Sci | Nov. 1952 |
| 77. | Have we Visitors from Space | H.B. Darrach
R. Ginna | Life
Readers Digest | Apr 7, 1952
July 1952 |
| 78. | How to Expose Flying Saucers; AF's Project for Photographing Them | R. Steiner | Pop.Sci. | Jan. 1953 |
| 79. | How to Fly a Saucer | | Colliers | Oct. 4, 1952 |
| 80. | How to see Flying Saucers | K. Swezey | Pop.Sci. | Sep. 1952 |
| 81. | Korean Saucers | | Newsweek | Mar 3, 1952 |
| 82. | Logging Time | H. Sheridan | Flying | Nov. 1952 |
| 83. | Magicians Scoff at Flying Saucers | J. Mulholland | Pop.Sci. | Sep. 1952 |
| 84. | More about out there; Review of "Is Another World Watching". Riddle of the Flying Saucers | G. Heard
W. Ley | Sat. Rev.
Lit. | Apr. 28, 1951 |
| 85. | More Saucers over North Korea | | Time | Mar. 3, 1952 |
| 86. | New Saucer Spidemic | | New Republic | Aug. 18, 1952 |
| 87. | New Theory of the Flying Saucers | D.H. Menzel | Sci. Digest | Sep. 1952 |
| 88. | No Visitors from Space | | Sci NL | Aug 30, 1952 |
| 89. | Of Spots before the Eyes | E.F. Mauer | Science | Dec. 19, 1952 |
| 90. | Reporter at Large | D. Lang | New Yorker | Sep. 6, 1952 |
| 91. | Saucer Reactions | R.E. Ginna | Life | June 9, 1952 |
| 92. | Saucer Season | | Newsweek | Aug. 11, 1952 |

93.	Saucers?	M. Thomson	Science	Dec 5, 1952
94.	Saucers Elude Astronomers	C.C. Wyllie	Sci NL	Jun 14, 1952
95.	Saucers Under Glass		Newsweek	Aug 18, 1952
96.	Scientist Diagnoses the Flying Saucer	L.M. Levitt	Pop. Mech.	Sep. 1952
97.	Something in the Air		Time	Aug. 11, 1952
98.	Temperature Inversions Cause Flying Saucers		Sc. NL	Dec. 20, 1952
99.	Those Flying Saucers		Time	June 9, 1952
100.	Washington's Blips		Life	Aug. 4, 1952
101.	What were the Flying Saucers		Pop. Sci.	Aug. 1952
102.	What's Going on in the Skies		US News	Aug. 8, 1952
103.	Where are the Flying Saucers	R.H. Wood	Av. Week	June 25, 1951
104.	Wind is up in Kansas		Time	Sep. 8, 1952
105.	Flying Saucer in Good News	H.J. Taylor	Readers Digest	July 1950
106.	Flying Saucers, Fact or Fiction	C. Fuller	Flying	July 1950 Sep 1950
107.	Belated Explanation on Flying Saucers (Balloons)		Time	Feb 26, 1951
108.	Flying Saucers Again		Scholastic	Feb. 21, 1951
109.	Flying Saucers; Ballooney not baloney		Av. Week	Feb. 1951
110.	Intelligent High Altitude Balloons		Science Digest	Mar. 1951

111.	Saucers, Secrecy, and Security	R.H. Wood	Av. Week	Feb.19,1951
112.	Farmer Trent's Flying Saucer		Life	June 26,1960
113.	Flying Saucers	H.T. Wilkins	Contemp.	July 1950
114.	Flying Saucer Mystery		Sci. NL	Mar 25, 1950
115.	Flying Saucers Again		Newsweek	Apr 17, 1950
116.	Flying Saucers, Fact or Fiction	C. Fuller	Flying	Jul 1950 Sep 1950
117.	In a Saucer from Venus: Review of Behind the Flying Saucers by F. Scully	R. Gelatt	Sat.R.Lit Sci NL	Sep 24, 1950 Oct 21, 1950 Sep 16, 1950
118.	Pies in the Sky in Mexico City		Time	Apr 3, 1950
119.	Psychoanalyzing the Flying Saucers		Sci.Digest	May, 1950
120.	Saucer-Eyed Dragons		Time	Apr 17, 1950
121.	Things that go Whiz; Flying Saucers		Time	May 9, 1949
122.	Visitors from Venus; Flying Saucer Yarn		Time	Jan. 9, 1950
123.	What You can Believe About Flying Saucers	C. Shalett	Sat.Eve.Post	Apr 30, 1949 May 7, 1949
124.	Flying Disks Break out over the U.S.		Life	Jul 21, 1947
125.	Flying Saucer Spots Before Their Eyes		Newsweek	Jul 14, 1947
126.	Flying Saucers; the Somethings		Time	July 14, 1947
127.	Illusions of Nature		Sci.Illus.	Oct. 1947
128.	Remember the Flying Saucers		Sci. Digest	Oct. 1947
129.	Seeing is Deceiving	M. Luckiesh	Sci.Illus.	June 1946

B. BOOKS ON FLYING SAUCERS

- | | |
|---|--|
| 1. Spacecraft From Beyond Three Dimensions | W. Gordon Allen |
| 2. The Inexplicable Sky | Arthur Constance |
| 3. Space, Gravity and the Flying Saucer | Leonard G. Camp |
| 4. Flying Saucers; an Analysis of the
AF Project Blue Book Rpt 14 | Leon Davidson |
| 5. Flying Saucer Review | Intro by Brinsley
le Poer Trench
(Citadel Press) |
| 6. They Rode in Space Ships | Gavin Gibbons |
| 7. Flying Saucers and Common Sense | Waveney Girvan |
| 8. The Case for the UFO, unidentified
Flying Objects | M.K. Jessup |
| 9. The Flying Saucer Conspiracy | D.H. Keyhoe |
| 10. Flying Saucers From Outer Space | D.H. Keyhoe |
| 11. Flying Saucers: Top Secret | D.H. Keyhoe |
| 12. The Great Flying Saucer Hoax; the
UFO Facts and their interpretation | Coral E. Lorenzen |
| 13. Flying Saucers | D.H. Menzel |
| 14. The World of Flying Saucers; A
Scientific Exam of a Major Myth
of the Space Age | D.H. Menzel |
| 15. Flying Saucers and the Straight-Line
Mystery (French Translation) | Aime Michel |
| 16. The Truth about Flying Saucers | Aime Michel |
| 17. National Investigations Committee
on Aerial Phenomena | Richard H. Hall,
Editor |
| 18. Flying Saucers and the USAF | Lawrence J. Tacker |
| 19. Anatomy of a Phenomenon: UFO's
in Space - A Scientific Appraisal | Jacques Vallee |
| 20. Flying Saucers Uncensored | Harold Tom Wilkins |
| 21. The UFO Annual | The Citadel Press
Editor, M.K. Jessup |