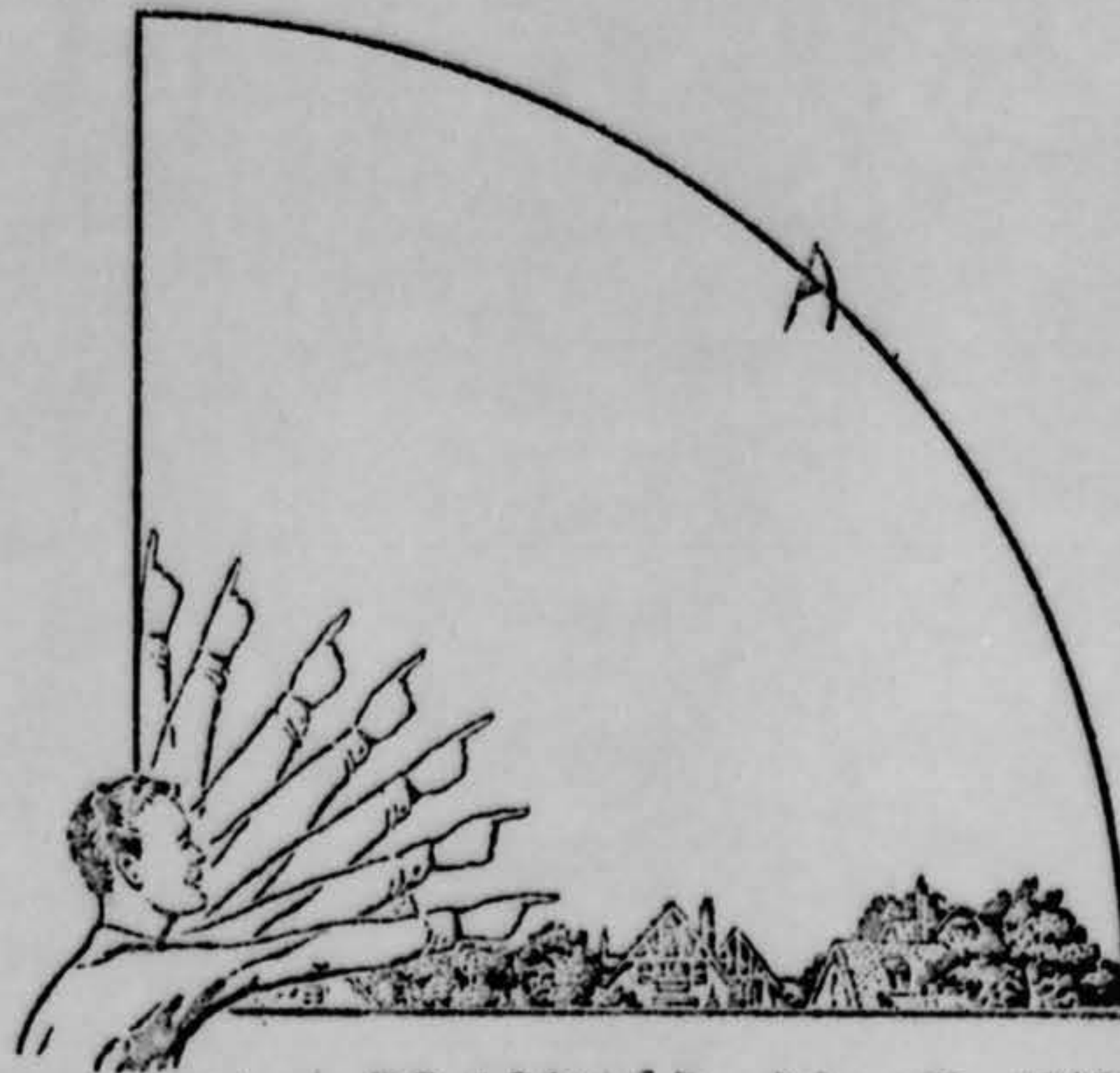


UFOB INDEX CARD      AISS-UFOB-406-56

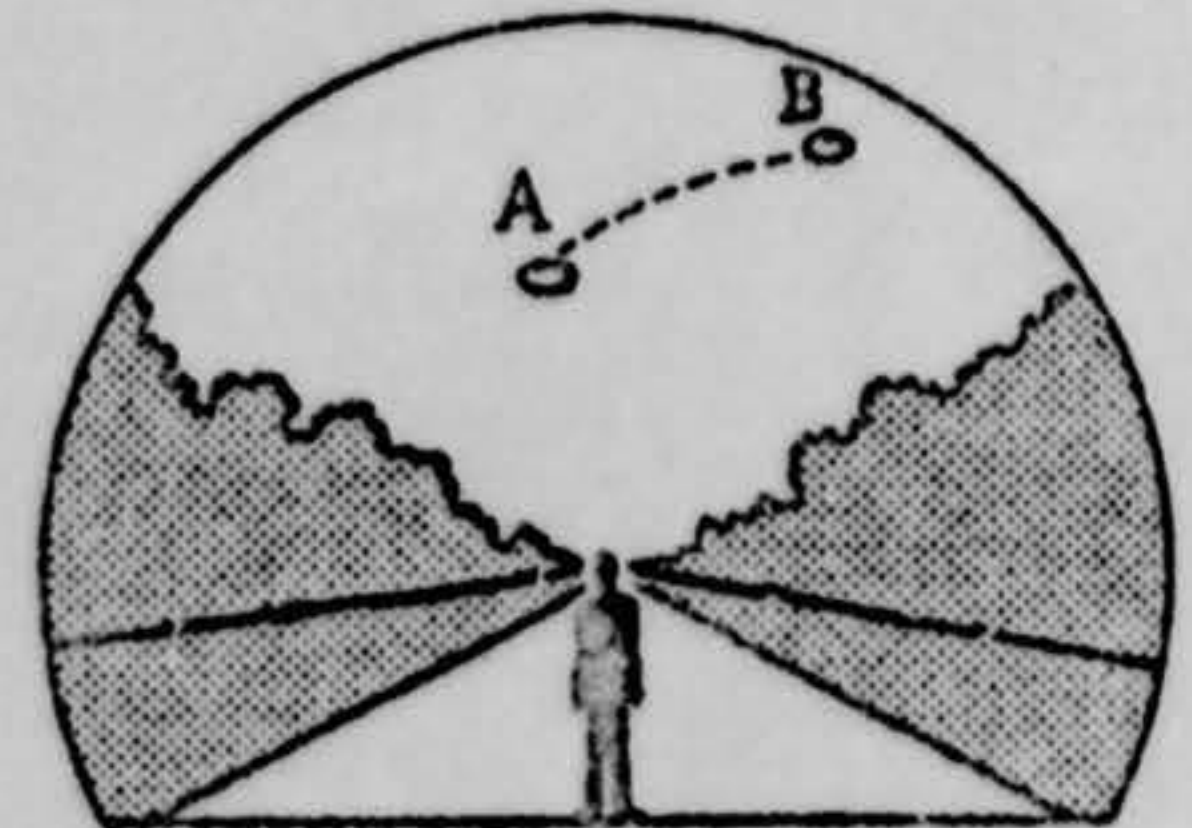
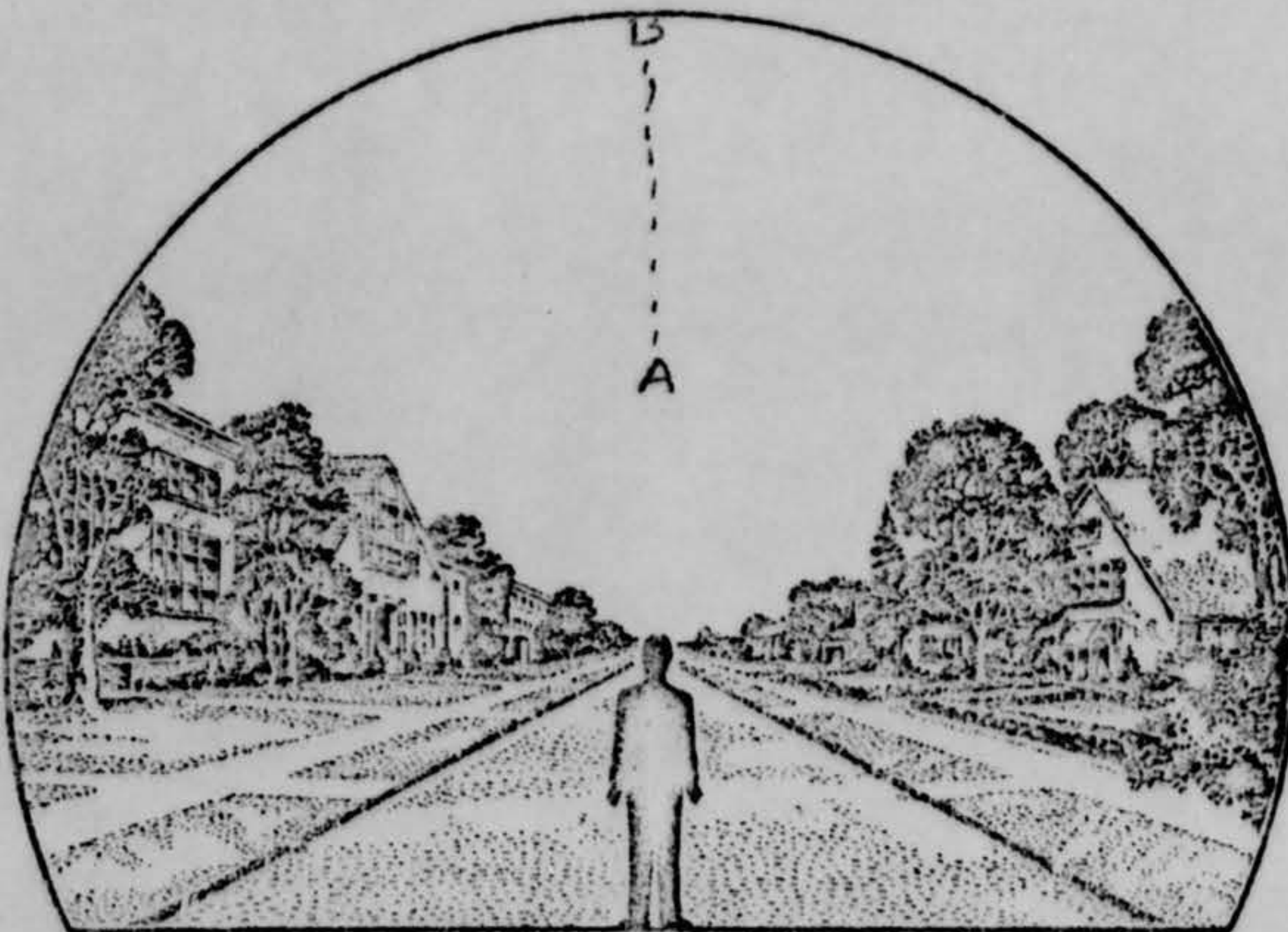
1. DATE <p align="center">13 Oct 56</p>	2. LOCATION <p align="center">Newburgh, New York</p>		12. CONCLUSIONS <input type="checkbox"/> Was Balloon <input checked="" type="checkbox"/> Probably Balloon <input type="checkbox"/> Possibly Balloon  <input type="checkbox"/> Was Aircraft <input type="checkbox"/> Probably Aircraft <input type="checkbox"/> Possibly Aircraft  <input type="checkbox"/> Was Astronomical <input type="checkbox"/> Probably Astronomical <input type="checkbox"/> Possibly Astronomical  <input type="checkbox"/> Other _____ <input type="checkbox"/> Insufficient Data for Evaluation <input type="checkbox"/> Unknown
3. DATE-TIME GROUP <p>13/2230Z Oct 56</p>	4. TYPE OF OBSERVATION <input checked="" type="checkbox"/> Ground-Visual <input type="checkbox"/> Ground-Radar <input type="checkbox"/> Air-Visual <input type="checkbox"/> Air-Intercept Radar		
5. PHOTOS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. SOURCE <p align="center">Civilian</p>		
7. LENGTH OF OBSERVATION <p>Still in sight</p>	8. NUMBER OF OBJECTS <p align="center">One</p>	9. COURSE <p align="center">Up and down</p>	
10. BRIEF SUMMARY OF SIGHTING  <p>One circular white (with red light) object, the size of the head of a pin at arm's length. Object was moving up and down and was still in sight at time of report.</p>		11. COMMENTS  <p>According to Reporting Officer there have been a considerable number of balloons launched in the area. Opinion of this Headquarters is that sighting was probably caused by a balloon.</p>	

32. In the following sketch, imagine that you are at the point shown. Place an "A" on the curved line to show how high the object was above the horizon (skyline) when you *first* saw it. Place a "B" on the same curved line to show how high the object was above the horizon (skyline) when you *last* saw it.



IT CHANGE IN SIZE ONLY. IT STAYED ABOUT THE SAME IN REFERENCE  
THE HORIZON

33. In the following larger sketch place an "A" at the position the object was when you *first* saw it, and a "B" at its position when you *last* saw it. Refer to smaller sketch as an example of how to complete the larger sketch.



THE SKETCH IS SUPPOSED TO  
SHOW THAT OBJECT WENT  
STRAIGHT UP. & ASSUME  
IT ~~WENT~~ WENT STRAIGHT UP  
AS I ONLY SAW IT CHANGE  
IN SIZE

34. What were the weather conditions at the time you saw the object?

34.1 CLOUDS (Circle One)

- a. Clear sky
- b. Hazy
- c. Scattered clouds
- d. Thick or heavy clouds
- e. Don't remember

34.2 WIND (Circle One)

- a. No wind
- b. Slight breeze
- c. Strong wind
- d. Don't remember

34.3 WEATHER (Circle One)

- a. Dry
- b. Fog, mist, or light rain
- c. Moderate or heavy rain
- d. Snow
- e. Don't remember

34.4 TEMPERATURE (Circle One)

- a. Cold
- b. Cool
- c. Warm
- d. Hot
- e. Don't remember

35. When did you report to some official that you had seen the object?

17      OCT      1956  
 Day                  Month                  Year





36. Was anyone else with you at the time you saw the object?

(Circle One) Yes                  No

36.1 IF you answered YES, did they see the object too?

(Circle One) Yes                  No

36.2 Please list their names and addresses:

 , UNIONVILLE, N.Y.  
 , UNIONVILLE, N.Y.  
 , SUSSEX, NEW JERSEY  
 , UNIONVILLE, NEW YORK

37. Was this the first time that you had seen an object or objects like this?

(Circle One) Yes                  No

37.1 IF you answered NO, then when, where, and under what circumstances did you see other ones?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

38. In your opinion what do you think the object was and what might have caused it?

I HAVEN'T ANY IDEA WHAT THE OBJECT WAS.  
 I AM SURE IT WASN'T ~~AN~~ AIRPLANE, BALLON, BIRD, STAR OR  
 AN OPTICAL ILLUSION

39. Do you think you can estimate the speed of the object?

(Circle One) Yes No

IF you answered YES, then what speed would you estimate? \_\_\_\_\_ m.p.h.

40. Do you think you can estimate how far away from you the object was?

(Circle One) Yes No

TO BE SEEN AT THE SAME TIME 4.5 MI APART MY GUESS WOULD BE

IF you answered YES, then how far away would you say it was? 70,000 feet.

41. Please give the following information about yourself:

NAME \_\_\_\_\_  
Last Name First Name Middle Name

ADDRESS \_\_\_\_\_  
Street City Zone State

TELEPHONE NUMBER \_\_\_\_\_

What is your present job? OWN & OPERATE WHOLESALE PHOTO BUSINESS

Age 44 Sex MALE

Please indicate any special educational training that you have had.

- a. Grade school
- b. High school
- c. College \_\_\_\_\_
- d. Post graduate \_\_\_\_\_
- e. e. Technical school AIR FORCE AM  
(Type) AM
- f. Other special training PHOTOGRAPHY

42. Date you completed this questionnaire:

8 NOV. 1956  
Day Month Year

## U. S. AIR FORCE TECHNICAL INFORMATION SHEET

## (SUMMARY DATA)

In order that your information may be filed and coded as accurately as possible, please use the following space to write out a short description of the event that you observed. You may repeat information that you have already given in the questionnaire, and add any further comments, statements, or sketches that you believe are important. Try to present the details of the observation in the order in which they occurred. Additional pages of the same size paper may be attached if they are needed.

NAME

(Please Print)

(Do Not Write in This Space)

CODE:

SIGNATURE

DATE

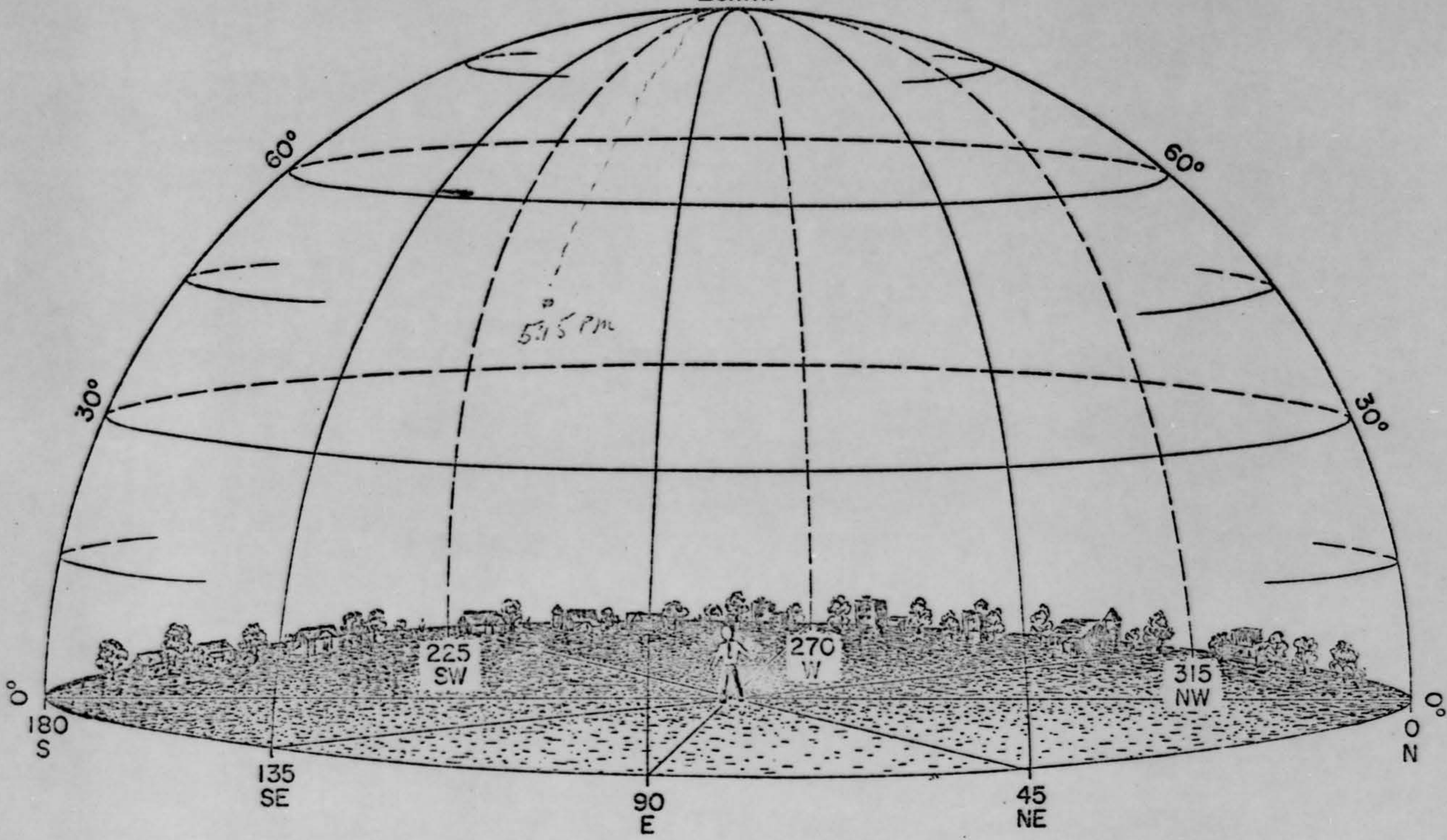
November 8 1956

IT WAS 5:15 PM. DAYLIGHT SAVING TIME OCT. 13<sup>TH</sup>, 1956  
I SAW THIS VERY BRIGHT OBJECT ABOUT THE SIZE OF A BASKETBALL. IT WAS A LITTLE TO THE SOUTH OF TOWN AND THERE WERE AT LEAST A DOZON PEOPLE WATCHING. THIS OBJECT STAYED IN THE SAME POSITION UNTIL 6:00 PM EXCEPT FOR A SLIGHT DRIFTING TO THE EAST. THROUGH FIELD GLASSES THE OBJECT SEEMED TO CHANGE SHAPE FROM RIGHT TO LEFT WITH A DARKER SUBSTANCE COMING OUT OF EACH SIDE WITH A PULSATING ACTION. AT 6:00 PM THE OBJECT CHANGED IN SIZE FROM A BASKETBALL TO THE SIZE OF A PIN HEAD. THIS CHANGE IN SIZE TOOK NOT LONGER THAN ONE MINUTE. I CONTINUED TO WATCH THE OBJECT UNTIL IT HAD DRIFTED OVER TO THE MOON WHICH WAS 7:00 PM.

THE WEATHER WAS WARM ABOUT 70°, SKY CLEAR, NO CLOUDS AT ALL. REPORTS CAME IN FROM CEDAR GROVE, NJ, ORANGE, NJ, SUSSEX, NJ. MOST OF NORTHERN NEW JERSEY SAW THE OBJECT FROM ACCOUNTS IN THE PAPERS

I FEEL CERTAIN PEOPLE IN ORANGE, NJ SAW THE SAME OBJECT I SAW. IF THIS WERE SO IT MUST HAVE BEEN HUGE.

6:00 PM  
90°  
Zenith



**PROJECT 10073 RECORD CARD**

<b>1. DATE</b> 25 October 1956		<b>2. LOCATION</b> Newburgh, New York		<b>12. CONCLUSIONS</b> <input checked="" type="checkbox"/> Was Balloon <input type="checkbox"/> Probably Balloon <input type="checkbox"/> Possibly Balloon	
<b>3. DATE-TIME GROUP</b> Local _____ GMT 26/0000Z		<b>4. TYPE OF OBSERVATION</b> <input checked="" type="checkbox"/> Ground-Visual <input type="checkbox"/> Ground-Radar <input type="checkbox"/> Air-Visual <input type="checkbox"/> Air-Intercept Radar		<input type="checkbox"/> Was Aircraft <input type="checkbox"/> Probably Aircraft <input type="checkbox"/> Possibly Aircraft	
<b>5. PHOTOS</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>6. SOURCE</b> Civilian		<input type="checkbox"/> Was Astronomical <input type="checkbox"/> Probably Astronomical <input type="checkbox"/> Possibly Astronomical	
<b>7. LENGTH OF OBSERVATION</b> 20 minutes		<b>8. NUMBER OF OBJECTS</b> one	<b>9. COURSE</b> up, down & sideways	<input type="checkbox"/> Other _____ <input type="checkbox"/> Insufficient Data for Evaluation <input type="checkbox"/> Unknown	
<b>10. BRIEF SUMMARY OF SIGHTING</b> One object as light with unknown shape. Color red - white - green. Odd movement - up, down and sideways.			<b>11. COMMENTS</b> Motion indicates balloon. Winds to E and SE. Reported direction of travel. Analysis is balloon consistent with limited data presented.		

26 Oct 56 07 21

Oct 26 03 48 '56

**ACTION**

LV 1 } 4EX  
2 }  
3 }  
4-4X204  
JL

SUSPECTED DUPLICATE OF MESSAGE  
PREVIOUSLY RELEASED. CHECK  
BEFORE TAKING ACTION

RA089

WPC112 YDD094Q TYB109 TMB094NBA046

PP RJEDEN RJEDWP RJEPNY RJEPHQ

ZFD RJEPNB

NBA032

PP RJEDEN RJEDWP RJEPNY RJEPHQ

DE RJEPNB 1

P 250200Z

FM COMDR EADF STEWART AFB NEWBURGH NY

TO RJEDEN/COMDR ADC ENT AFB COLO SPGS COLO

RJEPNY/COMDR 26TH AIR DIV DEF ROSLYN AFS NEW YORK

RJEDWP/COMDR AIR TECHNICAL INTELLIGENCE CENTER WPAFB OHIO

RJEPHQ/DIRECTOR OF INTELLIGENCE HEADQUARTERS USAF WASH DC

BT

/UNCLASSIFIED/ COC 11. SUBJ: UFOB

- 1. A. LIGHT
- B. UNKNOWN
- C. RED-WHITE-GREEN
- D. 1
- E. NEG
- F. ODD MOVEMENT
- G. NEG
- H. NONE
- I. MOVEMENT



I. MOVEMENT

PAGE TWO RJEPNB 1

II. A. UP & DOWN & SIDWAYS MOVEMENT

B. ELEVATION - N OF NBG. 8 PM - AZIMUTH - NNE OF NBG. 8;23 PM

C. UNK

D. VERTICAL & HORIZONTAL

E. UNK

F. 20 MIN.

III. A. VISUAL

B. NONE

C. NEG

IV. A. 26/0000Z

B. NIGHT

V. A. 41 50 N - 74 10 W

B. HJAM 4040

VI. A. ~~REDACTED~~ NEWBURGH, N. Y., MAIL CARRIER

B. NONE

VII. A. CLEAR

B. 1. SURFACE	120	-	10 KNOTS
2. 6	120	-	30 KNOTS
3. 10	120	-	15 KNOTS
4. 16	130	-	15 KNOTS

PAGE THREE R JEPNB 1

5. 20 90 - 10 KNOTS

6. 30 350 - 10 KNOTS

7. 50 290 - 30 KNOTS

8. 80 310 - 78 KNOTS

C. NONE

D. GOOD

E. NONE

F. NONE

VIII. A. NONE

B. NONE

C. NONE

IX. NONE

X. UNKNOWN

XI. COC CONTROLLER

A. POSSIBLE A/C

XII. A. NONE

B. NONE

XIII. NONE

BT

25/0222Z OCT R JEPNB

PAGE THREE RJEPNE 49

IX. A. NONE

X. A. NONE

XI. A. PLANET MARS ← NO!

XII. A. NONE

XIII. A. NONE

REMARKS: CONSIDERABLE WEATHER BALLONS HAVE CURRENTLY BEEN LAUNCHED IN  
THE 26TH AIR DIVISION.

BT

15/2047Z OCT RJEPNB

See [redacted]  
[redacted]  
[redacted]  
[redacted]  
[redacted]  
[redacted]  
[redacted]

D

Mr. [REDACTED]  
[REDACTED]  
Unionville, New York

Dear Mr. [REDACTED]

Your letter dated 17 October 1956, addressed to the Secretary of the Air Force, has been referred to this Center for reply.

With regard to your first question, a balloon can be seen at two widely separated points depending, of course, on its height. However, as our investigations often show, the balloon observed may not be the same seen by two observers miles apart. The reason for this being that hundreds of scheduled and unscheduled balloons are released throughout the United States every hour. For example, weather balloons are released all over the world almost simultaneously at approximately 0300, 0900, 1500 and 2100 Zone Time. Your nearest U. S. Weather Station will provide you with further details.

Commenting on your second question, we are certain that as you are a photo technician with some knowledge of optical computations, simple mathematical calculations will indicate that an object at 70,000 feet, and appearing the size of a basketball to the naked eye, would be of such tremendous size that in all probability the populace of many surrounding states would scarcely fail to notice and report it. A simple experiment will demonstrate this by holding a basketball in front of you and resting the bottom edge on the horizon. The ball would cover almost half of the visible sky. Fairly large balloons when viewed at a distance of 10,000 feet will only appear about the size of a large marble held at arm's length. Balloons definitely can be seen up to 70,000 feet under ideal weather conditions, but not the size you indicate.

Regarding your third question, numerous tests and experience with the effects of light on balloons, particularly when the sun is setting, has shown that unusual and pulsating shapes and displays are produced. In many instances, balloons at high altitudes and over locations that are in total darkness will glow with a brilliant red or orange light reflecting from the side and under surfaces of the balloon. This results from the slanting rays of the sun that may be some degrees behind the horizon and invisible to the ground observer. The majority of balloons launched at night carry lights.

File

4E4/Capt G.T.Gregory  
ltc/69216

With respect to your fourth question, there are no laws or directives prohibiting the reporting of unidentified aerial objects. To a large extent, the Air Force is dependant upon the general public for information and data on such matters. The nation-wide Crowd Observer Corps is one example of civilian participation in this undertaking. In fact, the UFO project was declassified and a summary of the results released to the general public by the Department of Defense some time ago. A copy is attached for your information.

As to your query in question five, you are referred to your nearest public or legal library for details concerning federal laws, statutes and codes.

In general, a survey of our files disclose that there was a considerable amount of balloon activity in the general area and on the same date which you report.

If you were an observer to the sighting in question you say, if you desire, accomplish the standard Air Force UFO questionnaire attached herewith and return to this Center. Certain details and other necessary data required for analysis and firm conclusion are lacking in your letter. Therefore, it would also be appreciated if you would include a statement as to the methods, computations and instruments used in arriving at some of the data submitted in your letter; for example, the figure of 70,000 feet, a necessary item in calculations.

Your interest in this matter is appreciated.

Sincerely,

2 Incls

1. DOD News Release and Summary
2. USAF UFO Questionnaire

13/23/56

23

Muti

### U. S. AIR FORCE TECHNICAL INFORMATION SHEET

This questionnaire has been prepared so that you can give the U. S. Air Force as much information as possible concerning the unidentified aerial phenomenon that you have observed. Please try to answer as many questions as you possibly can. The information that you give will be used for research purposes, and will be regarded as confidential material. Your name will not be used in connection with any statements, conclusions, or publications without your permission. We request this personal information so that, if it is deemed necessary, we may contact you for further details.

1. When did you see the object?

13 OCT 1956  
Day Month Year

2. Time of day: 5 15  
Hour Minutes

(Circle One): A.M. or P.M.

3. Time zone:

(Circle One): a. Eastern  
b. Central  
c. Mountain  
d. Pacific  
e. Other \_\_\_\_\_

(Circle One): a. Daylight Saving  
b. Standard

4. Where were you when you saw the object?

\_\_\_\_\_  
Nearest Postal Address UNIONVILLE NEW YORK  
City or Town State or Country

Additional remarks: \_\_\_\_\_

5. Estimate how long you saw the object. ONE FORTY-FIVE \_\_\_\_\_  
Hours Minutes Seconds

5.1 Circle one of the following to indicate how certain you are of your answer to Question 5.

a. Certain c. Not very sure  
b. Fairly certain d. Just a guess

6. What was the condition of the sky?

(Circle One): a. Bright daylight d. Just a trace of daylight  
b. Dull daylight e. No trace of daylight  
c. Bright twilight f. Don't remember

7. IF you saw the object during DAYLIGHT, TWILIGHT, or DAWN, where was the SUN located as you looked at the object?

(Circle One): a. In front of you d. To your left  
b. In back of you e. Overhead  
c. To your right f. Don't remember

13/23

8. IF you saw the object, at NIGHT, TWILIGHT, or DAWN, what did you notice concerning the STARS and MOON?

8.1 STARS (Circle One):

- a. None *NO STARS WHEN FIRST OBSERVED BUT*  
 b. A few *BRIGHTER THAN ANY STAR*  
 c. Many *AT 6:00 PM.*  
 d. Don't remember

8.2 MOON (Circle One):

- a. Bright moonlight  
 b. Dull moonlight  
 c. No moonlight — pitch dark  
 d. Don't remember

9. Was the object brighter than the background of the sky?

(Circle One):

a. Yes

b. No

c. Don't remember

10. IF it was BRIGHTER THAN the sky background, was the brightness like that of an automobile headlight?:

(Circle One) a. A mile or more away (a distant car)?

b. Several blocks away?

c. A block away?

d. Several yards away?

e. Other

11. Did the object:

(Circle One for each question)

- |  |                                      |                                     |            |
|--|--------------------------------------|-------------------------------------|------------|
| a. Appear to stand still at any time?            | <input checked="" type="radio"/> Yes | No                                  | Don't Know |
| b. Suddenly speed up and rush away at any time?  | <input checked="" type="radio"/> Yes | No                                  | Don't Know |
| c. Break up into parts or explode?               | Yes                                  | <input checked="" type="radio"/> No | Don't Know |
| d. Give off smoke? - - - - - <i>SOMETHING</i>    | Yes                                  | No                                  | Don't Know |
| e. Change brightness? <i>APPEARED TO RIGHT +</i> | Yes                                  | No                                  | Don't Know |
| f. Change shape? <i>TO LEFT ALTERATING</i>       | <input checked="" type="radio"/> Yes | No                                  | Don't Know |
| g. Flicker, throb, or pulsate?                   | <input checked="" type="radio"/> Yes | No                                  | Don't Know |

12. Did the object move behind something at anytime, particularly a cloud?

(Circle One):

Yes

No

Don't Know.

IF you answered YES, then tell what

it moved behind: AT 7:00 P.M. IT DISAPPEARED BEHIND THE MOON OR DRIFTED TO SAME POSITION

13. Did the object move in front of something at anytime, particularly a cloud?

(Circle One):

Yes

No

Don't Know.

IF you answered YES, then tell what

it moved in front of: THERE WERE ABSOLUTELY NO CLOUDS AT ANY TIME. AS IN #12 IT MERGED WITH THE MOON

14. Did the object appear:

(Circle One):

*VERY BRIGHT - BLUE WHITE OR FLOURESCENT*

a. Solid?

b. Transparent?

c. Don't Know.

15. Did you observe the object through any of the following?

- |                 |     |    |                |                                      |    |
|-----------------|-----|----|----------------|--------------------------------------|----|
| a. Eyeglasses   | Yes | No | e. Binoculars  | <input checked="" type="radio"/> Yes | No |
| b. Sun glasses  | Yes | No | f. Telescope   | <input checked="" type="radio"/> Yes | No |
| c. Windshield   | Yes | No | g. Theodolite  | Yes                                  | No |
| d. Window glass | Yes | No | h. Other _____ |                                      |    |

16. Tell in a few words the following things about the object.

- a. Sound NONE
- b. Color BLUE WHITE - FLOURESCENT

17. Draw a picture that will show the shape of the object or objects. Label and include in your sketch any details of the object that you saw such as wings, protrusions, etc., and especially exhaust trails or vapor trails. Place an arrow beside the drawing to show the direction the object was moving.

FIRST IMPRESSION WAS THAT IT WAS ROUND BUT ON WATCHING IT FOR AWHILE IT CHANGED SHAPE WHICH MAY HAVE BEEN DUE TO SOME SUBSTANCE COMING FROM FIRST THE RIGHT THEN THE LEFT ALTERNATING

18. The edges of the object were:

- (Circle One): a. Fuzzy or blurred  
 b. Like a bright star  
 c. Sharply outlined  
 d. Don't remember

e. Other \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

19. IF there was MORE THAN ONE object, then how many were there? \_\_\_\_\_  
 Draw a picture of how they were arranged, and put an arrow to show the direction that they were traveling.



20. Draw a picture that will show the motion that the object or objects made. Place an "A" at the beginning of the path, a "B" at the end of the path, and show any changes in direction during the course.

THIS OBJECT DRIFTED VERY SLOWLY TO THE EAST FROM 5:15 PM UNTIL 6:00 PM. AT 6:00 PM IT CHANGED IN SIZE ONLY

21. IF POSSIBLE, try to guess or estimate what the real size of the object was in its longest dimension.  
\_\_\_\_\_ feet.

22. How large did the object or objects appear as compared with one of the following objects held in the hand and at about arm's length?

(Circle One):

- |                  |                      |
|------------------|----------------------|
| a. Head of a pin | g. Silver dollar     |
| b. Pea           | h. Baseball          |
| c. Dime          | i. Grapefruit        |
| d. Nickel        | <u>j. Basketball</u> |
| e. Quarter       | k. Other _____       |
| f. Half dollar   |                      |

- 22.1 (Circle One of the following to indicate how certain you are of your answer to Question 22.)

- |                   |                  |
|-------------------|------------------|
| <u>a. Certain</u> | c. Not very sure |
| b. Fairly certain | d. Uncertain     |

23. How did the object or objects disappear from view? AT 6:00 PM. THE OBJECT  
CHANGED FROM THE SIZE OF A BASKETBALL TO THE SIZE  
OF A PIN HEAD IN ONE MINUTE

24. In order that you can give as clear a picture as possible of what you saw, we would like for you to imagine that you could construct the object that you saw. Of what type material would you make it? How large would it be, and what shape would it have? Describe in your own words a common object or objects which when placed up in the sky would give the same appearance as the object which you saw.

25. Where were you located when you saw the object?  
(Circle One):

- a. Inside a building
- b. In a car
- c. Outdoors
- d. In an airplane
- e. At sea
- f. Other \_\_\_\_\_

26. Were you (Circle One)

- a. In the business section of a city?
- b. In the residential section of a city?
- c. In open countryside?
- d. Flying near an airfield?
- e. Flying over a city?
- f. Flying over open country?
- g. Other \_\_\_\_\_

27. What were you doing at the time you saw the object, and how did you happen to notice it?

I WAS OUT WALKING THE DOG AND AT LEAST A DOZEN  
PEOPLE WERE WATCHING THE OBJECT. IF YOU WERE  
AT OF DOORS YOU COULDN'T MISS IT AS IT WAS SO BRIGHT.

28. IF you were MOVING IN AN AUTOMOBILE or other vehicle at the time, then complete the following questions:

28.1 What direction were you moving? (Circle One)

- |              |              |              |              |
|--------------|--------------|--------------|--------------|
| a. North     | c. East      | e. South     | g. West      |
| b. Northeast | d. Southeast | f. Southwest | h. Northwest |

28.2 How fast were you moving? \_\_\_\_\_ miles per hour.

28.3 Did you stop at any time while you were looking at the object?

(Circle One)      Yes      No

29. What direction were you looking when you first saw the object? (Circle One)

- |              |              |                 |              |
|--------------|--------------|-----------------|--------------|
| a. North     | c. East      | e. <u>South</u> | g. West      |
| b. Northeast | d. Southeast | f. Southwest    | h. Northwest |

30. What direction were you looking when you last saw the object? (Circle One)

- |                 |                     |              |              |
|-----------------|---------------------|--------------|--------------|
| a. <u>North</u> | c. East             | e. South     | g. West      |
| b. Northeast    | d. <u>Southeast</u> | f. Southwest | h. Northwest |

31. If you are familiar with bearing terms (angular direction), try to estimate the number of degrees the object was from true North and also the number of degrees it was upward from the horizon (elevation).

31.1 When it first appeared:

- a. From true North \_\_\_\_\_ degrees.
- b. From horizon \_\_\_\_\_ degrees.

31.2 When it disappeared:

- a. From true North \_\_\_\_\_ degrees.
- b. From horizon \_\_\_\_\_ degrees.