PROJECT 10073 RECORD CARD

1. DATE
31 Aug 61

2. LOCATION
Richmond, Virginia

3. DATE-TIME GROUP
Local 2000EDT
GMT 312400Z

4. TYPE OF OBSERVATION
☒ Ground-Visual ☐ Ground-Radar
☐ Air-Visual ☐ Air-Intercept Radar

5. PHOTOS
☐ Yes
☒ No

6. SOURCE
Civilian

7. LENGTH OF OBSERVATION
30 sec

8. NUMBER OF OBJECTS
1 - 2

9. COURSE
N

10. BRIEF SUMMARY OF SIGHTING
Objt w/lights running down side observed in N. Believed to be tanker or commerical airliner with lights.

11. COMMENTS
2 separate sighting. 1 fm Richmond with plane to N. 1 fm Ashland Virginia with plane to S. Ashland sighting prompted report fm Richmond. Richmond report fm writer working for newspaper who covers aviation. States objt was ~~x~~ definiately a/c. Ashland report varies with flight info only. Flight was at ~~nxikh~~ night and identification made fm ~~kg~~ lights Probably refueling operation.

12. CONCLUSIONS
- ☐ Was Balloon
- ☐ Probably Balloon
- ☐ Possibly Balloon
- ☐ Was Aircraft
- ☒ Probably Aircraft (Refueling Op)
- ☐ Possibly Aircraft
- ☐ Was Astronomical
- ☐ Probably Astronomical
- ☐ Possibly Astronomical
- ☒ ~~Other Prob refueling oper~~
- ☐ Insufficient Data for Evaluation
- ☐ Unknown

ATIC FORM 329 (REV 26 SEP 52)

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?

Thurs. (Day) Aug. 31 (Month) 1961 (Year)

2. Time of day: Between 8 and 9 p.m. (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?

[redacted] (Nearest Postal Address) Richmond 29, (City or Town) Virginia (State or Country)

Additional remarks: _____

5. How long was object in sight? _____ Hours _____ Minutes _____ Seconds Unknown I just watched it for 30 seconds or so.

5.1 How was time in sight determined?

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

6. What was the condition of the sky?

DAY
a. Bright
b. Cloudy

(NIGHT)
a. Bright
b. Cloudy

Clear

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

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

LID
DECLAS

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

8.1 STARS *(Circle One)*:

a. None
b. A few
c. Many
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. The object appeared:

(Circle One): a. As a light b. Shiny c. Dark d. Don't remember

10. If it appeared as a light, was it brighter than the brightest stars?

11. Did the object: *(Circle One for each question)*

a. Appear to stand still at any time?	Yes	No	Don't Know
b. Suddenly speed up and rush away at any time?	Yes	No	Don't Know
c. Break up into parts or explode?	Yes	No	Don't Know
d. Give off smoke?	Yes	No	Don't Know
e. Change brightness?	Yes	No	Don't Know
f. Change shape?	Yes	No	Don't Know
g. Flash or flicker?	Yes	No	Don't Know
h. Disappear and reappear ?	Yes	No	Don't Know

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

(Circle One): Yes No Don't Know. IF you answered YES, then tell what it moved behind: _____

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

(Circle One): Yes No Don't Know. IF you answered YES, then tell what in front of: _____

14. Did the object appear: *(Circle One)*: a. Solid b. Transparent c. Vapor d. Don't Know

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

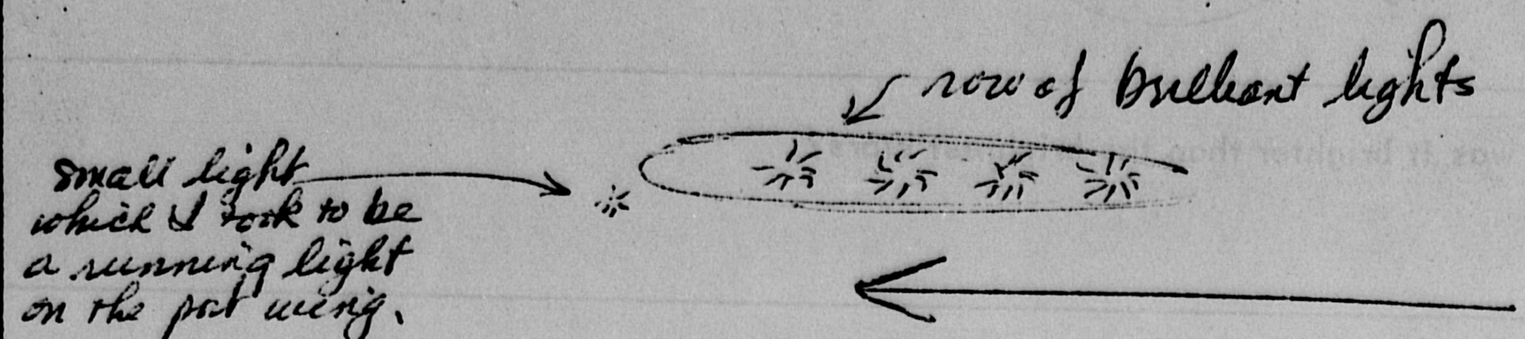
a. Eyeglasses	Yes	No	e. Binoculars	Yes	No
b. Sun glasses	Yes	No	f. Telescope	Yes	No
c. Windshield	Yes	No	g. Theodolite	Yes	No
d. Window glass	Yes	No	h. Other _____		

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

a. Sound I believe I heard airplane engenies (piston) at the time ⊗

b. Color Silver with a row of bright lights down its side

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.



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? No more than one.
Draw a picture of how they were arranged, and put an arrow to show the direction that they were traveling.

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 (type)
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. 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?

Walking across my back yard. I must have heard airplane engines to make me look up.

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
b. Northeast
c. East
d. Southeast
e. South
f. Southwest
g. West
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
b. Northeast
c. East
d. Southeast
e. South
f. Southwest
g. West
h. Northwest
i. Overhead

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

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

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

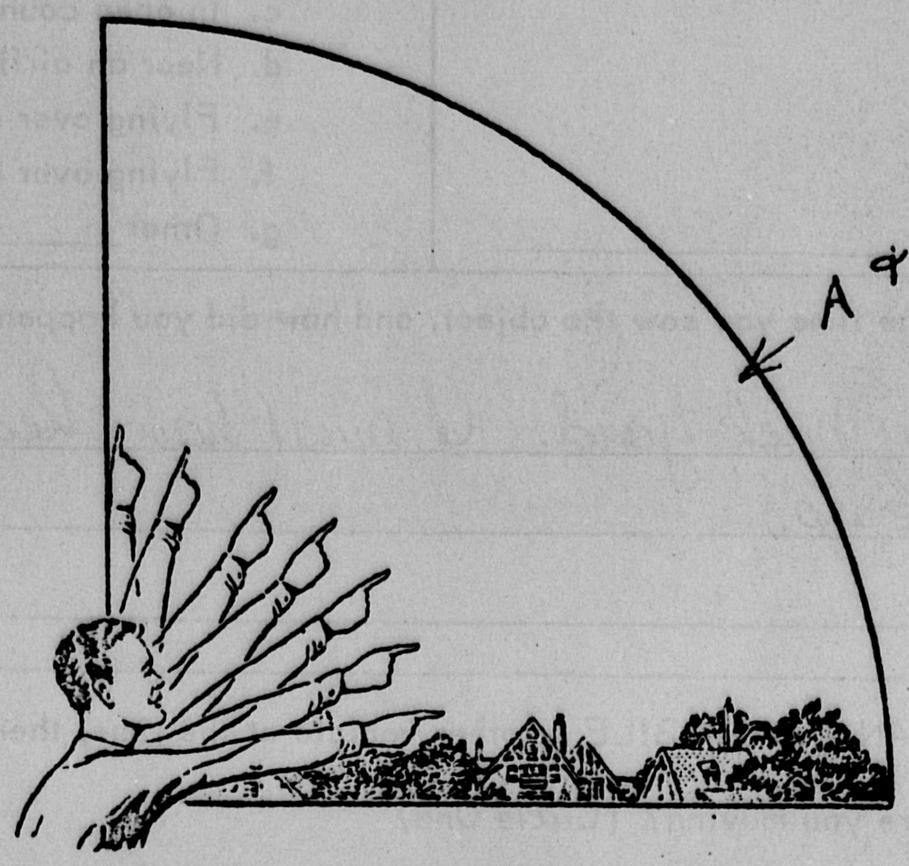
31.1 When it first appeared:

a. From true North_____degrees.
b. From horizon_____degrees.

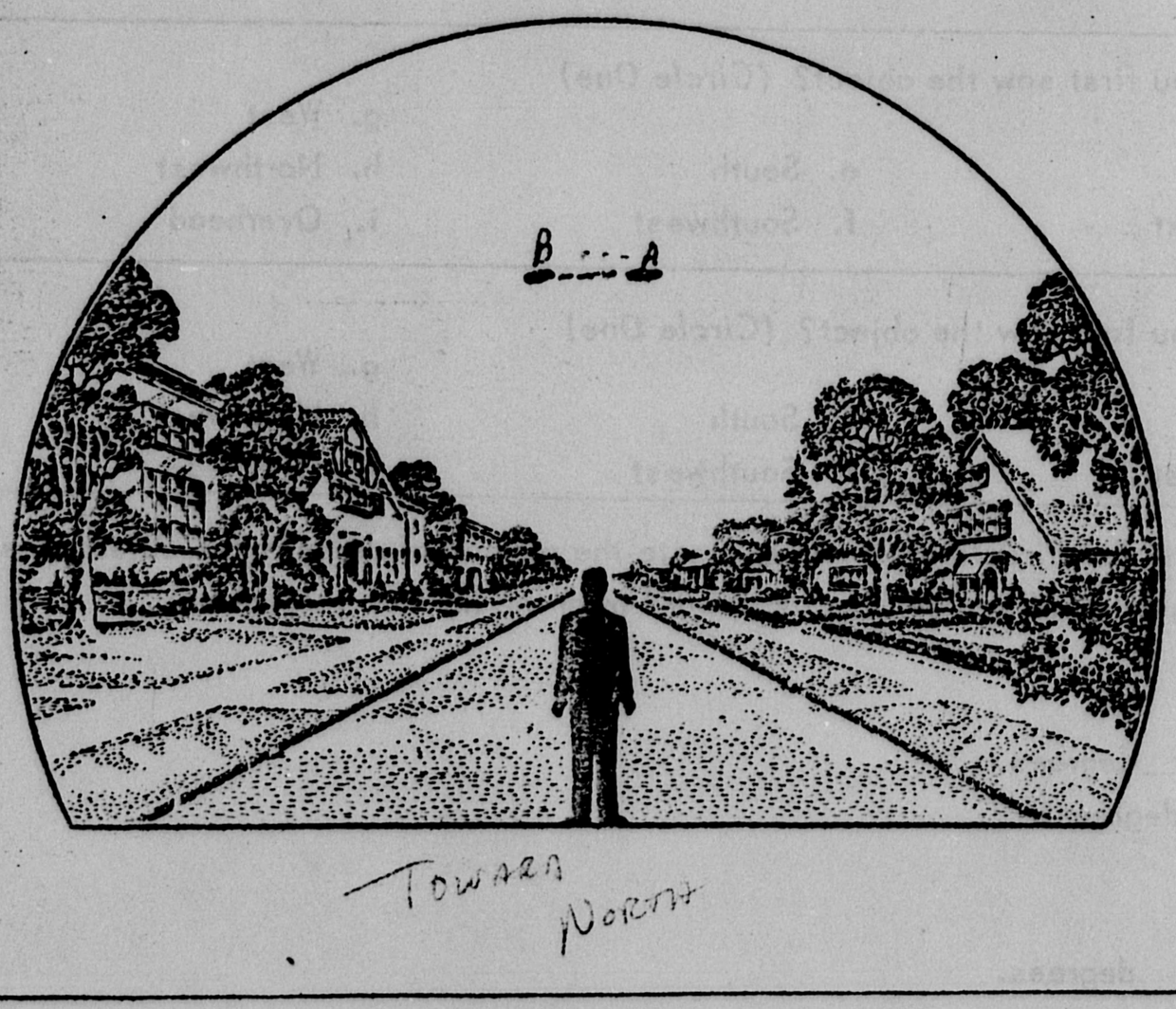
31.2 When it disappeared:

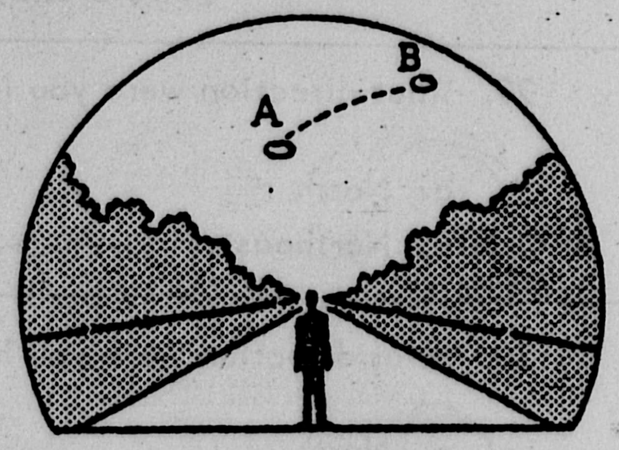
a. From true North_____degrees.
b. From horizon_____degrees.

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.



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.





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

CLOUDS *(Circle One)*

a. Clear sky
b. Hazy
c. Scattered clouds
d. Thick or heavy clouds

WEATHER *(Circle One)*

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

35. When and to whom did you report that you had seen the object?

Friday (Day) Sept. 1, (Month) 1961 (Year) Air Force, Washington

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:

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 thought at first it was an aerial tanker of Tactical Air Command or Strategic Air Command. It might have been an airliner brilliantly lighted inside.

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? 150 mph

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

(Circle One) (Yes) No

IF you answered YES, then how far away would you say it was? about a mile away, about 5,000 feet high.

41. Please give the following information about yourself:

NAME [redacted] (Last Name) [redacted] (First Name) (NMI) (Middle Name)

ADDRESS [redacted] (Street) Richmond (City) 29 (Zone) Va. (State)

TELEPHONE NUMBER [redacted]

Age 37 Sex Male

Indicate any additional information about yourself, including any education, which might be pertinent.

I am aviation writer for the [redacted] Richmond, Va. I wouldn't be reporting this if a fellow hadn't called me from Ashland, Va., with a UFO sighting at about the same time I had seen this brilliantly lighted object.

42. Date you completed this questionnaire: Tues. (Day) Sept. 5, (Month) 1961 (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 [redacted] (Please)

SIGNATURE

DATE September 5, 1961

(Do Not Write in This Space)

CODE:

Somewhere between 8 and 9 p.m., as I was walking across my back yard from the house to a tool house, I looked up and saw what I took to be a very brightly-lighted airplane, moving from east to west.

My first thought was that it was an aerial tanker of the Tactical Air Command, which has headquarters near Richmond; but I checked with TAC and it did not have any tankers in this area at that time.

Also, I checked with the Air Traffic Control radar people at Richmond's Byrd Field, to see if they had picked up anything unusual on their screen Thursday night, and they said they had not. This sighting of mine would have been well within range of the Byrd Field radar.

After calling the Air Force in Washington, I had about decided that this was a civilian airliner, with its bright cabin lights visible through portholes because it was in a slight left bank.

But, because a man had called from Ashland with the story of a bright

light standing stationary in the sky, then moving off, stopping and reversing course immediately to chase another airplane, I thought I'd betterx turn in this report . The Ashland man said his sighting was to the south. And, because Ashland is north of Richmond, and my sighting was to the north, it is probable that we both saw the same thing.

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? (See ITEM 42)

31 (Day) Sept (?) (Month) 1961 (Year)

2. Time of day: 8 (Hour) 15 (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?

Ashland (Nearest Postal Address) Ashland (City or Town) Hanover Co. Virginia (State or Country)

Additional remarks: _____

5. How long was object in sight? _____ Hours 7 Minutes _____ Seconds

5.1 How was time in sight determined?

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

6. What was the condition of the sky?

DAY	NIGHT ✓
a. Bright	a. Bright ✓ no moon
b. Cloudy	b. (illegible)

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

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

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

8.1 STARS *(Circle One)*:

a. None
b. (A few)
c. Many
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. The object appeared:

(Circle One): a. (As a light) b. Shiny c. Dark d. Don't remember

10. If it appeared as a light, was it brighter than the brightest stars? yes

11. Did the object:

	(Circle One for each question)		
a. Appear to stand still at any time?	(Yes)	No	Don't Know
b. Suddenly speed up and rush away at any time?	(Yes)	No	Don't Know
c. Break up into parts or explode?	Yes	No	Don't Know
d. Give off smoke?	Yes	No	Don't Know
e. Change brightness?	Yes	No	Don't Know
f. Change shape?	Yes	No	Don't Know
g. Flash or flicker?	Yes	No	Don't Know
h. Disappear and reappear ?	Yes	No	Don't Know

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

(Circle One): (Yes) No Don't Know. IF you answered YES, then tell what it moved behind: a clump of trees impairing our vision for a few seconds.

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

(Circle One): Yes No Don't Know. IF you answered YES, then tell what in front of: _____

14. Did the object appear: *(Circle One)*: a. (Solid) b. Transparent c. Vapor d. Don't Know

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

a. Eyeglasses	Yes	No	e. Binoculars	Yes	No
b. Sun glasses	Yes	No	f. Telescope	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 no sound.

b. Color reddish white.

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.


← just a round light.

when standing still but changed very slightly in shape and color - when traveling across sky.

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

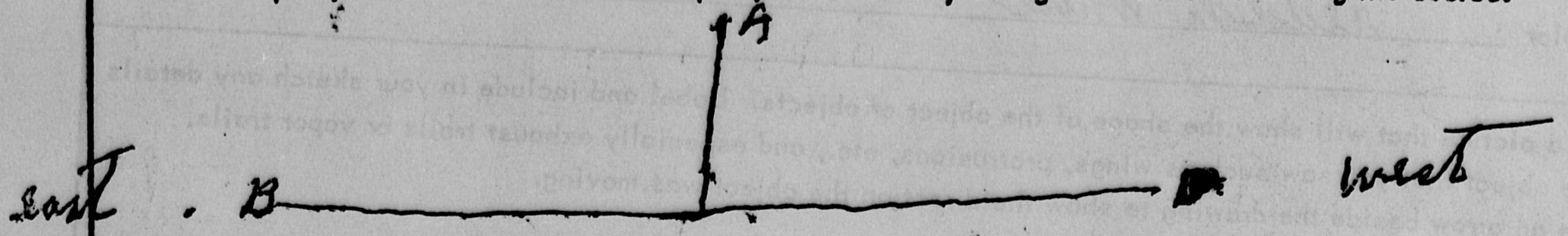
e. Other _____

19. IF there was MORE THAN ONE object, then how many were there? 2

Draw a picture of how they were arranged, and put on arrow to show the direction that they were traveling.

One was an aeroplane with tail light blinking the other one descended from a high altitude to that of the aeroplane. remained stationary for 20 or 30 sec. then started traveling toward plane. they passed each other and after traveling almost to the edge of our vision in the west turned to reverse it self without any maneuvering and followed the aeroplane out of sight to the east.

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.



21. How large did the object appear to you as compared to an object with which you are familiar?

About the size of a large plane Light

22. We wish to know the angular size. Hold a match stick at arm's length in line with a known object and note how much of the object is covered by the head of the match. If you had performed this experiment at the time of the sighting, how much of the object would have been covered by the match head?

5.

23. Did the object disappear while you were watching it? If so, how? It first disappeared temporarily behind a clump of trees obstructing our vision and at the end disappeared over the horizon going east

24. In order that you can give as clear a picture as possible of what you saw, 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. When it was standing still it seemed to be a round light, slightly reddish. It changed to a smaller and whiter light when traveling across our field of vision. It was apparently about four miles to the earth and two thousand feet up except when descending from higher altitude. about the size of a large plane.

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 (type)
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. 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 being coached on masonry work by a friend He saw it first and we both watched it together.

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
b. Northeast
c. East
d. Southeast
e. South
f. Southwest
g. West
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
b. Northeast
c. East
d. Southeast
e. South
f. Southwest
g. West
h. Northwest
i. Overhead

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

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

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

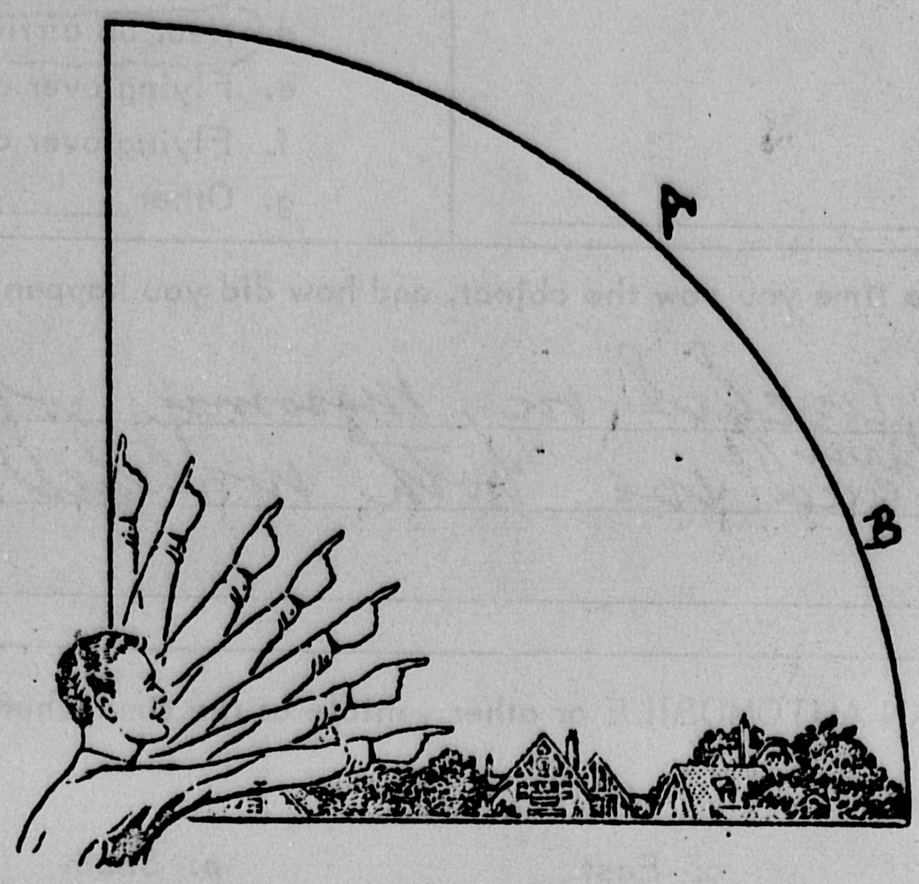
31.1 When it first appeared:

a. From true North_____degrees.
b. From horizon _____ degrees.

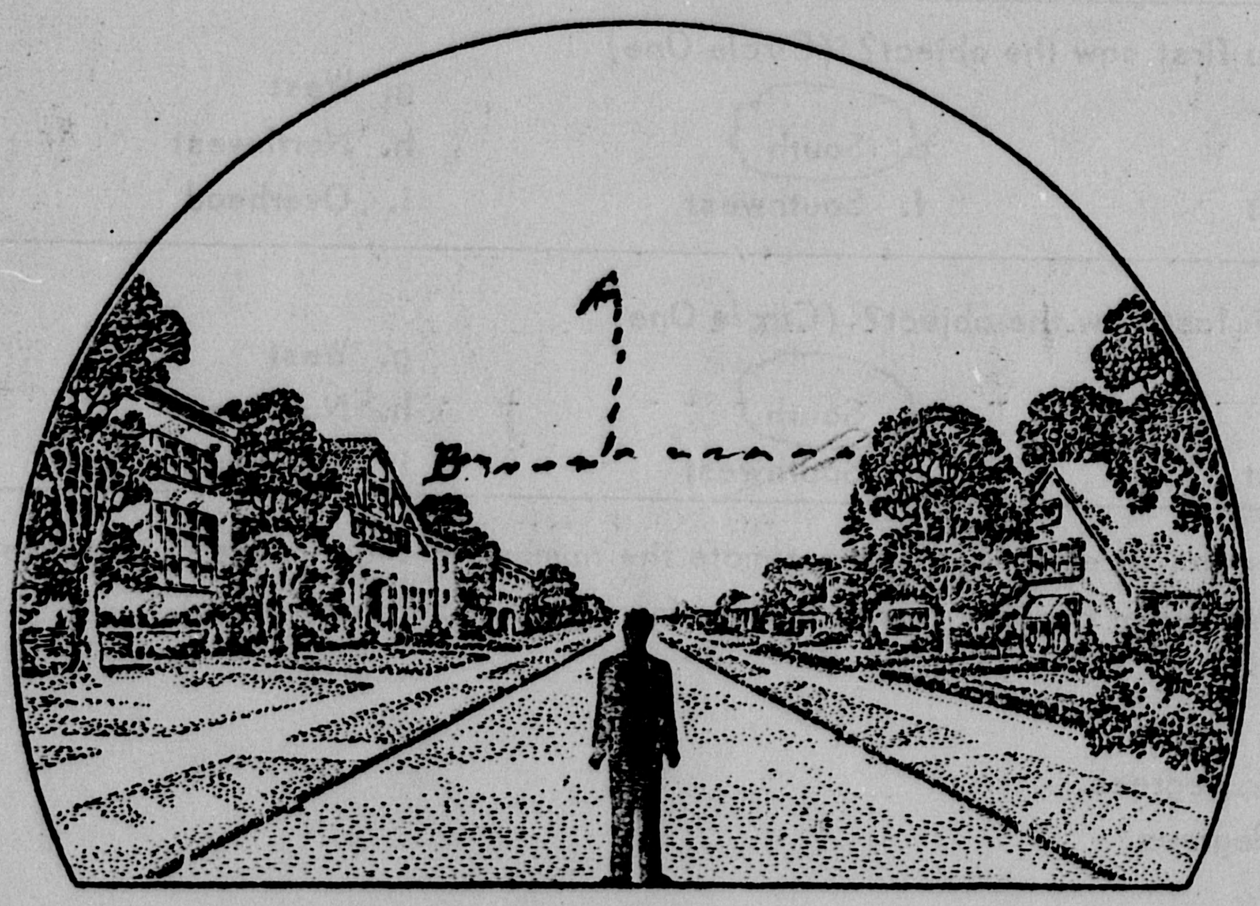
31.2 When it disappeared:

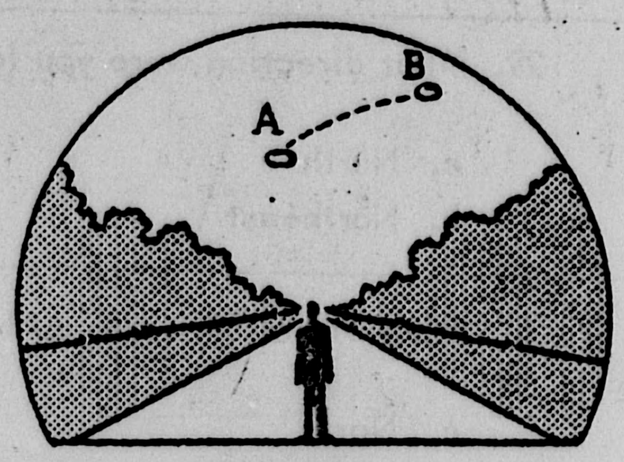
a. From true North_____ degrees.
b. From horizon _____degrees.

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.



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.





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

CLOUDS *(Circle One)*

a. (Clear sky)
b. Hazy
c. Scattered clouds
d. Thick or heavy clouds

WEATHER *(Circle One)*

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

35. When and to whom did you report that you had seen the object? Mr Cox of the Richmond News papers Richmond Va.

1 Day — Sept Month — 61 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: [redacted]

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?

[redacted] saw it descend from a high altitude and both of us watched afterwards. It could have been a plane but I can't see how a plane could stand still in mid air. It hovered to first for a helicopter. (over to last page)

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? A little faster than a normal plane speed

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

(Circle One) (Yes) No

IF you answered YES, then how far away would you say it was? 4 miles.

41. Please give the following information about yourself:

NAME [redacted] First Name Noble. Middle Name

ADDRESS [redacted] Street City Zone Va. State

TELEPHONE NUMBER [redacted] Business A W [redacted]

Age 51 Sex Male

Indicate any additional information about yourself, including any education, which might be pertinent.

I attended Randolph Macon College for 3 yrs. I am a partner in ownership of [redacted] Cleaners Ashland Va.

42. Date you completed this questionnaire: 7 Day Sept Month 51 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 [redacted]

SIGNATURE [redacted]

DATE August 7 / 1961

(Do Not Write in This Space)

CODE:

what ever the object was, It definietely descended from a high altitude to that which this plane was traveling ~~at~~ and reached a short time, took off to meet the plane, reversed it self after passing the plane and followed the south of the plane out of our sight to the East. It was traveling at a much greater speed. at a more rapid rate than the plane because it traveled almost to the horizon edge in the west; reversed it self and had almost caught up with the plane when they dissapeared in the east.

ASTRONOMY

Jupiter, Saturn Shine in August

The planet Jupiter is the brightest object in the sky next to the moon during August. Saturn is as bright as a first magnitude star, James Stokley reports.

► TWO BRIGHT PLANETS—Jupiter and Saturn—have joined with the stars normally visible at this time of year to make the evening skies of August especially brilliant.

Both planets, and the stars as well, are shown on the accompanying maps. These depict the skies as they appear about ten p.m. your own kind of standard time (add one hour for daylight saving time) at the first of August, an hour earlier at the middle of the month and two hours earlier as the month comes to an end.

Jupiter has a magnitude of minus 2.3, on the scale used by astronomers for rating the brilliance of celestial objects. Thus it far brighter than any other object in the evening sky except the moon, so Jupiter is easy to identify. It has been in the constellation of Capricornus, the horned goat, but in August moves next door into Sagittarius, the archer, in the southern sky.

About five degrees to the west (right) is Saturn. Its magnitude is plus 0.4 so it ranks with the first magnitude stars; however, it is about a twelfth as bright as Jupiter. Both of these planets are visible as soon as it gets dark and remain in view until shortly before sunrise.

The stars in Sagittarius outline a teapot. The handle is toward Saturn, and the spout to the right, toward the next constellation of Scorpius the scorpion. In the left-hand end of this group, the stars are in a curved line which forms the scorpion's tail. That is the way the figure was pictured in the old star maps. The modern astronomer, of course, ignores these picturesque old figures of lions, bears and dogs as well as scorpions.

At the center of the scorpion is a bright star, red in color, called Antares, which is about half as bright as Saturn.

Looking higher in the southern sky, you can see two other stars of the first magnitude. Directly above Jupiter is Aquila, the eagle, with brilliant Altair. And still higher—virtually overhead, in fact—you find Vega, in Lyra, the lyre. Below this group, toward the east, is Cygnus, the swan, shown only on the southern map, partly on the northern because on the latter that Deneb, the brightest star in Cygnus, is shown.

The big dipper, which is a part of Ursa Major, the great bear, shines in the northeast. In it are the pointers, the two stars in the dipper's bowl that show the direction of Polaris, the pole star. Although of second magnitude, this is a well-known orb, because it always stands in about the same direction to the north.

If you follow the handle of the dipper, and continue its curve to the left, it will bring you to another star of the first magnitude. This is Arcturus, in Boötes, the herdsman.

Stay up late on August nights and you may see another planet, for Venus rises in the east about three hours before the sun. Its magnitude is now about minus 3.5 which makes it about three times as bright as Jupiter. Venus, Jupiter and Saturn are the only planets now visible; the other two that are sometimes visible without a telescope, Mercury and Mars, are too nearly in the sun's direction to be seen.

From about the middle of August to the end, the moon will shine in the sky during evening hours. On Friday, Aug. 25, it will be full, rising in the east as the sun is setting in the west.

During that night the moon will pass through the shadow of earth, producing a lunar eclipse. At 10:09 p.m., EST, the eclipse will be at its height. It will not be quite totally eclipsed as a narrow sliver of the moon's surface will remain illuminated by the direct rays of the sun.

The shadow of our planet actually has two parts. That shown is the inner part the umbra, where the globe would completely hide the sun. But around it is a larger region, called the penumbra, where the sun is only partly hidden. At 7:37 p.m. EST the moon starts to enter the penumbra. In the western part of the United States, of course, the moon will not have risen when this happens.

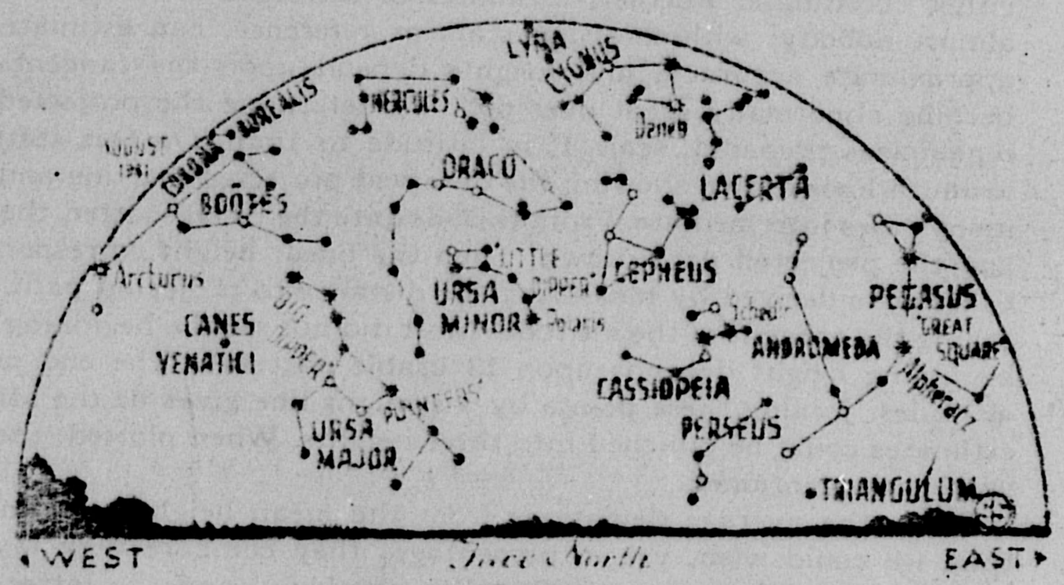
But even in the east, where the moon will be in the sky, nothing will be seen until later when the eastern edge of the lunar disc may seem to be a little fainter than normal.

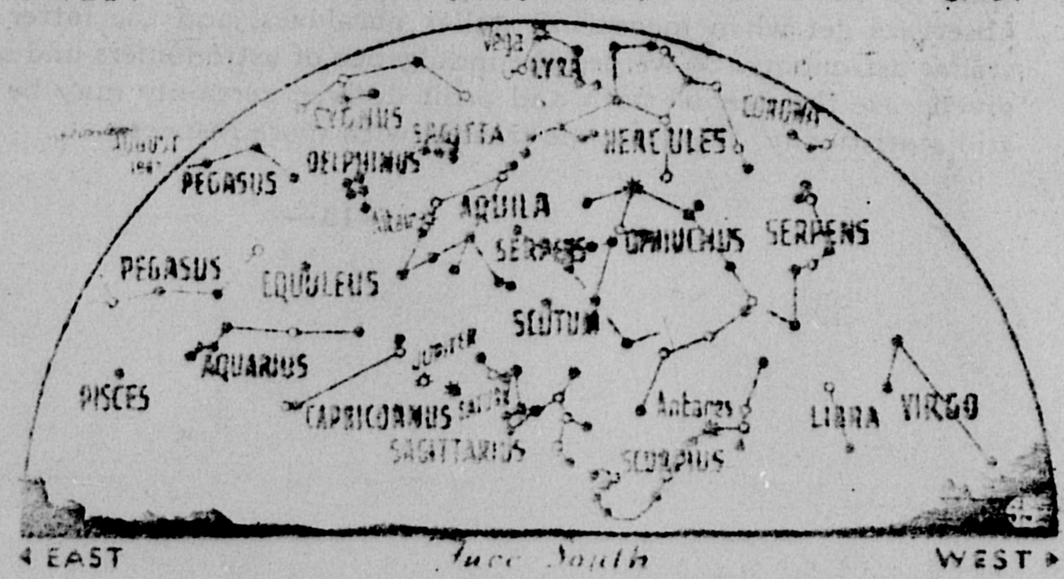
At 8:36 p.m. EST the moon starts to enter the umbra, or earth's shadow, and the eclipse really begins. Very soon afterwards there will be a noticeable dimming of the eastern edge of the disc. The darkened portion will gradually increase until the maximum eclipse at 10:09 when more than 99% of the lunar diameter will be in shadow. Then the shaded area will become smaller until at 11:42 p.m., the moon will be completely out of the umbra. As the eclipse comes to an end, the moon will have risen even on the Pacific coast, and the eclipse will be visible throughout all of North America except the northwestern tip of Alaska.

Even when immersed almost completely in the earth's shadow, the moon will still be visible, shining with a dull, coppery-red glow. This is an effect of the earth's atmosphere, which acts as a prism to bend sunlight around into the shadow. As the rays pass through the air above our heads, some of the blue light is scattered, and this is what gives the daytime sky its blue color.

White light consists of a mixture of several colors—red, orange, yellow, green, blue and violet. With the blue and other colors at that end of the spectrum reduced, red predominates, and so the light that is bent into the shadow is much more red than ordinary sunlight.

The lunar eclipse on Aug. 25 is not the





SYMBOLS FOR STARS IN ORDER OF BRIGHTNESS

10 Aug 1961

American Meteor Society report
For 1967 by Dr. C.P. Olivier

1952 April 25.69 G.M.T.
A.M.S. No. 2395

In our files are found 12 reports of an extremely brilliant fireball which appeared on the above date at 11:28 p.m., E.S.T. Out of the 12 reports 10 came from Wilmington, N.C., one from 5 miles south, one from 25 miles north, so all observers lay along a south-north line. The reports were gathered by Donald Strayhorn of Wilmington, then an active A.M.S. member. The reports were unanimous that the fireball's color was blue or green and its size excessive, estimates of the latter running from one half to three times the size of full Moon. Allowing for probable exaggeration, its apparent diameter must have approximated 15′ to 20′. Based on 9 estimates, the duration was 3.06 ±0.76 sec.—a smaller average error than usual. From 9 stations the path was reported as vertical or almost so, and the beginning altitude as 45° or greater, and the end at north point at about 5° altitude. As the sidereal time was about 13;33, the right ascension of the radiant would, for a vertical path, approximate that. No information on the radiant's declination nor linear heights can be obtained from the data. Its path probably ended near the Va.-N.C. border. Evidently, however, it was not from the Lyrid radiant, but may well have come from A.M.S. fireball radiant No. 5056. Though all the usual results could not be obtained it seemed worth while to put this remarkable fireball on record.

FIREBALL of 1961 August 10.61 G.M.T.
A.M.S. No. 2294

On this date at about 8;32 p.m., C.S.T., a fireball was observed from the Chicago-Milwaukee area, and some 250 reports were gathered by the Adler Planetarium and eventually sent to A.M.S. headquarters. There has been a long delay in solving the path of the principal body to which these reports refer. A detailed study indicated that 30 or more referred to a second bright object, seen to the northeast, while, due to the date, Perseids were doubtless present in numbers and some observers did not differentiate between an ordinary meteor and the fireball in question. Despite these complications a solution has finally been obtained. Unfortunately only about 5 people tried to refer the path or end of it to stars, Ursa Major being so used. All the rest depended upon estimates of both directions and altitudes, nobody seems to have used any instrument for measuring either coordinate.

A preliminary study weeded out about half of the reports as having no value for either coordinate. Further, estimates of altitudes of 60° and over were omitted, as almost nobody, without using stars as reference, can estimate such arcs with even approximate accuracy, and heights depend upon the tangents of the angle, which become abnormally great over 60°. To determine the projected path, a chart of the region was prepared, scale 1′ in latitude to 1mm. On this stations were plotted and azimuth lines drawn showing the observed projected starting and ending points, and in many cases intermediate. From this, despite the usual scatter, these points were derived and the projected path drawn. Then the linear height corresponding to observed altitudes were derived by measuring the distance to projected path from each station and taking the tangent of the altitude. Most did not see the beginning point, but our derived beginning height depends upon 13 usable altitudes. The end point depends upon 43 altitudes. Joining these points by a straight line gives us the atmospheric path. Other estimates could be bunched into three heights. When plotted, these fit in tolerably well with path mentioned.

While the average deviations from the mean heights certainly show larger values than we could wish, yet in percentages they compare very favorably with those all observers get when measuring stellar paralaxes, and the latter are the very basis of stellar astronomy. So we beg the indulgence of astronomers and suggest that, while in a given case the fireball path and orbit derived certainly may be considerably in error, still statistically, they may be treated with more respect.

American Meteor Society Report
#67

The color of the fireball was white perhaps with a bluish tinge, but during the last part of its flight, when lower in atmosphere, it turned red. Its train was yellowish or red, but duration of this most uncertain. The fireball itself showed a distinct disk, but no certain numerical magnitude can be given. Estimates of duration, leaving out impossibly long ones, are from 1 to 25 seconds. Probably the longer ones refer to duration of the train. Using the average of 55 estimates, we get 7.3 ± 3.1 sec. This gives an observed velocity of 36 km/sec. which is obviously most uncertain. The object broke into two or more pieces near end. Estimates of brightness vary wildly, but undoubtedly to many it showed a disk. Using the reports which seem more accurate its magnitude as seen from Chicago would have been —8, which incidentally would be near the zenithal magnitude. Our thanks go almost exclusively to Adler Planetarium as the staff there at once recorded most of the reports by telephone, while what they had seen was fresh in the observers' minds. The usual numerical data follow. An examination of them will show marked similarities to A.M.S. No. 2338 observed on August 16 1936.

Date	1961 Aug. 10.6	
Sidereal time at end point	268° 55′	
Began over	λ = 88° 40′ W, Ø = 41° 03′ N at 110 ± 34 km	
Ended over	λ = 88° 24′ W, Ø = 43° 23′ N at 48 ± 24 km	
Projected path	256 km	
Path	264 km	
Duration	7.3 ± 3.1 sec	
Observed velocity	36 km/sec	
Radiant uncorrected	a = 4°	h = 14°
Curvature correction		—1° 10′
Parabolic zenith correction		—9° 2′
Radiant corrected	a = 4°	h = 3° 48′
	α = 263°	δ = —43°
	λ = 257°	β = —20°
Parabolic orbit:	i = 6°, Ω = 318°, π = 330°, q = 1 A.U.	

FIREBALL of 1966 July 6
A.M.S. No. 2393

A very bright fireball was reported on this date at approximately 10:58 p.m., E.S.T., from stations in Ohio, Indiana, Illinois and Iowa. However, the Illinois report must be of another fireball, almost simultaneous, as its path does not agree with other data. We then have available 9 reports, 6 kindly sent in from Wright-Patterson AFB. Considerable time and effort have been spent in trying to secure a good solution; what is here given is far from fully satisfactory, but is the best the data afford. Three observers report its brightness was comparable to the Moon's, one that it cast distinct shadow, two gave its magnitude as —6. We may assume its zenithal magnitude was about —9 at its end. The duration of flight was 2.75 ± 0.5 sec. 8 observers. Its color was blue green. No long enduring train was left. It flared once. The usual data follow but no orbit is computed due to the relative uncertainty of the atmospheric path.

Date	1966 July 6.66	
Sidereal time at end point	254° 46′	
Began over	λ = 85° 35′, Ø = 39° 40′ at 134 ± 24 km	
Ended over	λ = 89° 24′, Ø = 40° 16′ at 85 ± 33 km	
Projected length of path	164 km	
Length of path	171 km	
Observed velocity	62 km/sec	
Radiant uncorrected	a = 280°	h = 17° 17′
Radiant corrected for curvature and zenith attraction	a = 280°	h = 15° 34′
	α = 327°	δ = +3°

Aug. 12, Hanover, Ont. Four witnesses observed a disc-shaped object maneuver north to south, then tilt on edge. Apparently metallic, it seemed to be reflecting sunlight.

No Case (Information Only)
Source: CUFOR News Bulletin #11, September 61

14 August 1961
Chicago, Illinois

CHICAGO, ILLINOIS - 14 Aug 61: Steve Faver, a 17-year-old student has reported to CUFOR what may or may not have been a singular meteor. At 9:15 P.M. he saw a dull luminous orange object travel from SSE to NW, disappearing over a building several blocks away in about a minute's time. He didn't see the object come into view as he was watching Echo I to the east.

The general appearance and direction of this object bring into mind the reddish object seen by Adler Planetarium personnel almost one year before (26 Aug 60); one of dozens such sightings at that time. (See January and July, 1961, issues for details) It is rather puzzling that such sightings should occur with such timing.

Steve, an amateur astronomer and, curiously, formerly a member of the Adler Planetarium Society, said in his report to CUFOR, "I do not think it could have been a meteorite since it traveled almost from horizon to horizon! Besides.... the color (being too dull) prompts me to think that this was not a meteorite." He has viewed many meteor showers and said this was not similar to any meteor he had ever seen. Asked what he thought it might have been, he replied, "I honestly do not know."

Aug. 14, Chatham, Mass. Two UFOs, circular in shape, were witnessed by Charles Flionis, AF veteran. They climbed "rocketlike," Flionis said, at a speed apparently greater than any jet.

No Case (Information)

17 Aug 1961
Stillwater, Minnesota

Aug. 17, Stillwater, Minn. Five citizens witnessed a V-formation of glowing lights, moving about 500 feet above the St. Croix River. Sighting resembled the "Lubbock Lights" (Texas, 1951) except that the V flew on edge, point forward. The lights moved in unison; two witnesses reported the sighting as "a solid V-shaped object with body lights."

Aug. 19, Farmington, N.M. At 6 p.m., a flat, round shiny object was seen hovering by several witnesses. Elaine Smith reported to NICAP: "When I first saw it, it was stationary . . . . Suddenly it took off with a tremendous burst of speed. It climbed, all the while accelerating."

Aug. 21, Bayview, Idaho. Two bright glowing objects, one of which exploded, were seen maneuvering over Pend Oreille Lake by J.M. Wilson and his family. In a duplicate AF-NICAP report, Wilson said one object flared up, as if exploding, and disappeared. Moments later, a second UFO appeared and circled the explosion area. After hovering there for two minutes, it shot straight up out of sight.

Aug. 25, Amity, Oreg. Six lighted objects appearing like parachute flares, fell from the sky. No traces of the objects were found despite a search. Nor, to date, has there been any answer to this puzzle.

Aug. 29. Wichita, Kansas. A glowing object which descended toward the earth, then headed northeast, was reported to the Wichita Eagle. A witness said she saw round ports, or exhaust outlets, on the UFO.

LO CASE (INFORMATION ONLY)
SOURCE CIVILIAN UFO RESEARCH #12 DTD OCT 61

30 AUG 1961
EVANSTON, ILLINOIS

CIVILIAN UFO RESEARCH OCT 61 NO CASE INFO ONLY 30 AUG 61

EVANSTON OBJECT IDENTIFIED AS SPUTNIK IV: Last month we reported an Evanston, Ill., sighting that occurred on the evening of 30 Aug 61 at approximately 9:07 P.M. At that time a man saw an object apparently following Echo I across the sky. When first seen, the object was about 1° to the left rear of Echo; when last seen, about ½°.

Having had little training in astronomical matters, we called upon Tom Coombs, Deputy Director for Moonwatch Activities at the Chicago Moonwatch Station. Tom, taking the estimated time and speed (in comparison with Echo), checked the orbital prediction sheets he receives from the Smithsonian Astrophysical Observatory. Using some "bafflingly ingenious mechanisms far beyond our mental powers," he learned that 60 Epsilon I (Sputnik IV) would have been in that area at that time, disappearing into the earth's shadow shortly after 9:07 P.M. Moonwatch observers lost track of the satellite on 15 May 60, so the Chicago team wasn't expecting it. Epsilon's speed is about seven times that of Echo and its magnitude is 1.5. The witness in this sighting gave a rough speed estimate of twice that of Echo; a magnitude guess of 2.0. There is little doubt, therefore, that the Evanston object was Sputnik IV.

We are indebted to Tom for his assistance. This is an example of what could happen in UFO research if private organizations and public research facilities would work together.

No Case (Information Only)
Source: CUFOR News Bulletin #11, September 61

30 August 1961
Evanston, Illinois

EVANSTON, ILLINOIS - 30 Aug 61: Roderick Aguilliard was also watching Echo I. The time was between 9:00 and 9:15 P.M. The metallic satellite had just passed zenith when he noticed a star-like object about half the brightness of Echo moving on a parallel course to the satellite's left rear at a distance equal to twice the moon's diameter (about 1°). In the estimated 45 seconds of observation, the object had closed the distance to about $\frac{1}{2}^{o}$, going the same direction as Echo.

This case in undergoing further study. A follow-up may be expected.

No CASE (INFORMATION ONLY)

30 AUG 61
CINCINNATI, OHIO

Aug. 30, Cincinnati, O. About 9 p.m., a red-lighted object which appeared to climb, then explode with a white flash, was seen by many citizens.

A mysterious light exploded almost noiselessly over Cincinnati on the night of August 30th and again on September 5th. No explanation could be found.

Aug & SEP 61

HEADQUARTERS
FOREIGN TECHNOLOGY DIVISION
AIR FORCE SYSTEMS COMMAND
UNITED STATES AIR FORCE
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

REPLY TO
ATTN OF: TD-E/Major Friend

SUBJECT: Request for UFO Information [redacted]

21 SEP 1961

File

TO: SAFOI-3c (Major Coleman)

1. Reference the attached letter to SAFOI from Mr. [redacted] requesting information on the USAF UFO program.

2. Search of the FTD UFO files fails to reveal any reports of the 30 Aug 61 and 5 Sep 61 sightings which Mr. [redacted] indicates occurred over Cincinnati, Ohio.

3. Mr. [redacted] also makes reference to a 7 Aug 61 letter which he wrote to the USAF requesting information on two UFO sightings in the Chicago area. FTD has no record of a letter of this date from Mr. [redacted]. It is suggested that Mr [redacted] resubmit his request for information on the Chicago sightings and that he include the dates on which the incidents are supposed to have occurred.

EDWARD H. WYNN
Colonel, USAF
Deputy for Science
and Components

1 Atch
Ltr fm Mr [redacted] dtd
11 Sep 61.

Civilian U. F. O. Research

[redacted]

CHICAGO 18, ILLINOIS
KEYSTONE 9-6238

11 September 1961

Major William T. Coleman
UFO Project Officer
Public Information Division, USAF
Pentagon Building
Washington 25, D.C.

Dear Major Coleman:

At about 2100 hrs. on 30 Aug 61, a reddish object was seen over Cincinnati, Ohio, as it traveled very slowly across the sky until it suddenly exploded in a flash of white light. At the same time on the night of 5 Sep 61, the performance was repeated.

I would like to know the results of the official investigation into these sightings and the facts on which these results were based.

On 7 Aug 61 I requested information regarding two Chicago area sightings of a few years ago. If possible, would you please inform as to the action being taken on this request?

If a Department of Defense news release regarding UFO's has been issued since January, 1961, I would like to have a copy.

Your help in these matters would be greatly appreciated.

Sincerely;

[redacted]
Civilian UFO Research

3/1

(3)

6 October 1961

Dear Mr. [redacted]:

In an earlier letter I replied to you concerning the sightings you mentioned in previous correspondence.

The latest Department of Defense release on the subject of UFOs is enclosed. I had forwarded you this release several months back. It will be several weeks before the new fact sheet is published.

Sincerely,

WILLIAM T. COLEMAN, JR.
Major, USAF
UFO Project Officer
Public Information Division
Office of Information

Mr. [redacted]
Civilian UFO Research
[redacted] North Drake Avenue
Chicago 18, Illinois

Civilian U. F. O. Research

[redacted]

[redacted]
CHICAGO 18, ILLINOIS
KEYSTONE 9-6238

3 October 1961

Major William T. Coleman
UFO Project Officer
Public Information Division, USAF
Pentagon Building
Washington 25, D.C.

Dear Major Coleman:

On 10 June 1961, at your request, I sent you information regarding a sighting of an unidentified flying object over Rushville, Nebraska early in January, 1961. I would appreciate knowing, in accordance with AFR 200-2, section 8, the outcome of the official study into this sighting.

Would you please send my a copy of the latest DOD News Release on the subject?

On 7 August 1961, I requested information regarding two Chicago-area sightings. (4 Nov 57, Elmwood Park; 19 Jul 58, Des Plaines, Ill.) I have been trying to obtain information about these incidents for over a year. If I cannot get it through normal channels, I may be forced to seek assistanne$, as I have done before.

On 11 September 1961, I requested information regarding a series of UFO reports (30 Aug 61; 5 Sep 61) over Cincinnati, Ohio. I would like to know the official conclusion in this case, in accordance with AFR 200-2, section 8.

Major, I have a considerable amount of patience and I feel you are competent for the work you are doing. I hope you will provide the information requesting, thereby insuring ~~the in~~ that both these chracteristics will remain unchanged.

$incerely;

[redacted]
Civilian UFO Research

4/1

No Case (Information Only)
Source: CUFOR News Bulletin #11, September 61

30 August 1961
Cincinnati, Ohio

CINCINNATI, OHIO - 30 Aug 61: (Approximately 9:00 PM) Dozens of Cincinnati residents watched a flickering red light moving "very, very, slowly" toward the southwest. It suddenly exploded "like a great white light". Witnesses scattered over a wide area gave remarkably similar descriptions of the phenomenon.

A spokesman at Greater Cincinnati Airport rejected the possibility that aircraft were involved. The Cincinnati Weather Bureau could offer no explanation. Thomas Van Flandern, Teamleader of the Cincinnati Moonwatch Team, ruled out meteor, star, satellite, or other space phenomena.

- 5 Sep 61: All seemed quiet within a day or so; then, on the 5th, at almost precisely the same time as the first incident, the object (or a similar object) appeared over the city for a second time with the same results. Two additional observations were made this time, though. Witnesses closer to the object heard a soft but explosion-like sound just as the object exploded. Also, the object was seen below clouds which the Weather Bureau said were at 10,000 feet, thus the object was most likely between 5,000 and 10,000 feet high.

- 11 Sep 61: The above sightings were precisely six days apart and were quite similar in nature. Six more days passed and at 8:57 PM, Sept. 11th, CUFOR member Ann Mattix (who sent in the above reports) saw a reddish-white light travel from the northeast to the southeast at a high rate of speed on a slightly erratic course. Although similar in appearance and direction of movement, some obvious differences appear in this latest sighting: The object traveled at high speed; the was no explosion (the witnesses were at the bottom of a hill, however, which might have precented them from seeing an explosion further along the object's course); witnesses heard a sound not unlike a jet engine as the object approached the southwestern horizon, whereas the earlier case involved a sound like an explosion. A possibility is that this object was an aircraft and the time was purely coincidental; also possible is that the earlier cases involved Strategic Air Command aircraft, which may have dropped flares as part of a training operation.

- 17 Sep 61 ?: Mrs. Mattix and her husband intend to maintain a "skywatch" on the sixth night following the thid sighting. Anything gleaned from this operation will be reported.

1 - 15 SEPTEMBER 1961 SIGHTINGS

DATE	LOCATION	OBSERVER	EVALUATION
1	Sandusky, Ohio	[redacted] (PHOTO (Neg) (*)	Insufficient Data
2	Las Lunas, New Mexico	[redacted]	Insufficient Data
2	Albuquerque, New Mexico	[redacted]	Other (MIRAGE/INVERSION)
3	36.48N 124.18W; 344.49N 124.38W (Pacific)	Military	Astro (METEOR)
3	34.47N 166.19W (Pacific)	Military	Satellite
4	Columbus, Ohio	[redacted]	Astro (JUPITER)
4	Springfield, Ohio	[redacted]	Astro (ANTARES)
5	Sidney, Ohio	[redacted]	Astro (ANTARES)
5	Kelowna, British Columbia, Canada	Multi	Astro (METEOR)
7	Dayton, Ohio	[redacted]	Astro (METEOR)
7	Troy, Ohio	[redacted]	Aircraft
7	Cape Canaveral, Florida	Tracking RADAR	Astro (STAR)
7	Dayton, Ohio	[redacted]	1. Balloon 2. Aircraft
8	Dayton, Ohio	[redacted]	Astro (CAPELLA)
8	Vandalia, Ohio	[redacted]	Astro (METEOR)
10	Hammond, Indiana	[redacted]	Astro (CAPELLA)
11	Englewood Hills, Ohio	[redacted]	Astro (STARS/PLANETS)
11	San Diego, California	[redacted]	Insufficient Data
11	Dawson Creek, British Columbia, Canad	[redacted]	Astro (METEOR)
12	Chicago, Illinois	[redacted]	Insufficient Data
13	East Coast and Midwest United States	Multi	Other (NASA Rocket)
13	Belmont, Ohio	[redacted]	Insufficient Data
14	Osan, Korea	Military	Aircraft
14	36.30N 139.45E (Far East)	Military	Astro (METEOR)
14	Hillard, Ohio	[redacted]	Astro (MARS)
14	67.50N 165.00W (Bering Sea)	[redacted]	Astro (VENUS)
15	20.50N 176.00E (Pacific)	Civilian	Astro (METEOR)

ADDITIONAL REPORTED SIGHTINGS (NOT CASES)

DATE	LOCATION	SOURCE	EVALUATION
Sep	Universe	Science News Ltr	
Sep	Connorsville, Indiana	Physical Specimen Report	Specimen (*)
3	San Francisco, California (PHOTOS)	Newsclipping	

(*) See separate folder