PROJECT 10073 RECORD CARD

1. DATE
6 & 22 Aug 61

2. LOCATION
Middletown, Ohio

3. DATE-TIME GROUP
Local 0030
GMT 0605302

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

5. PHOTOS
☐ Yes
☒ No

6. SOURCE
Civilian

7. LENGTH OF OBSERVATION
1 hr

8. NUMBER OF OBJECTS
1

9. COURSE
SE

10. BRIEF SUMMARY OF SIGHTING Red light with flashed of white, green, and blue. Brightness of 2nd magnitude star. About twice size of Jupiter viewed through a telescope. In orbit around earth.

11. COMMENTS Objt of sighting was probably star Capella (Auriga). Motion of objt, its appearance, duration fo sighting, and its position all tend to substantiate conclusion that objt was probably star Capella. Witness indicates that he calculated orbital period of objt to be 23 hrs, 55 min and 42 sec. Length of a sidereal day is 23 hrs, 56 min, 4109 sec. All evidence indicates objt was a star.

12. CONCLUSIONS
- ☐ Was Balloon
- ☐ Probably Balloon
- ☐ Possibly Balloon
- ☐ Was Aircraft
- ☐ Probably Aircraft
- ☐ Possibly Aircraft
- ☐ Was Astronomical CAPELLA
- ☒ Probably Astronomical
- ☐ Possibly Astronomical
- ☐ Other
- ☐ Insufficient Data for Evaluation
- ☐ Unknown

ATIC FORM 329 (REV 26 SEP 52)

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? Middletown Journal

15	3	61
Day	Month	Year

24 4 61 Information office WPAFB

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 name[redacted]

Middletown, Ohio

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?

The object is a satellite, in orbit around the earth, as I stated in my letter. I believe it is too large to be put in orbit by either the U.S.A. or Russia. I Believe it is an astroid that has approached the earth at correct speed and angle to be pulled into orbit.

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? 15,000 — 18,000 M.P.H.

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? 52,000 — 65,000 miles

41. Please give the following information about yourself:

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

ADDRESS [redacted] (Street) Middletown, (City) _____ (Zone) Ohio (State)

TELEPHONE NUMBER [redacted]

Age 40 Sex M

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

42. Date you completed this questionnaire: 7 (Day) 7 (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 Print)

SIGNATURE [redacted]

DATE 9/7/1961

(Do Not Write in This Space)

CODE:

At 0:30 hours August 6, 1961 while searching for the Wilson Comet that had been visible in the North East, I saw an object that appeared to be something other than a star. I got it in my telescope and it moved out of view. I picked it up three or four more times and the same thing happened. I knew then it was moving. I sketched the position I first saw it, by compass direction and watched it for an hour. Again I checked it's position - and determined that it had moved approx. 15°. Since it moved toward the Southeast I knew it was not a star.

Since the first observation I have continued to view the object every clear night. I have sighted it perhaps as many

as twenty five times in the past thirty-
two days.

As I stated in my letter to the Public
Information Office at W.P.A.F.B., it can
be observed any clear night. At first
it appeared at 12:30 P.M. After four
weeks it has changed so as to
appear at 10:30 P.M. From this I
conclude that it takes 23 hrs. 55 min. and
42 sec. to orbit. I can not remember
hearing of a satilite being put in orbit
that required this much time to orbit and
be visible to the naked eye. Therefore I
am trying to determen what it is.

September 9, 1961 I observed the object
with a lense on the scope on which I
had mounted cross hairs. I observed the
plant Jupiter with the same lense and
found that Jupiter covered only fifty as
much area. From this I figure the object
in orbit must be about 25 mile long. To
appear at this I figured on 18,000 m.p.h.
speed to orbit, which would place it at
an altitude of approx. 65,000 miles.

Have one of your staff look for it between
10:00 and 10:30 P.M. the first clear night. It always
appears 20° east of magnetic north. With a 100 power or
better telescope they can observe what I observed on
Page 3 of this letter.

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?

6 (Day) 8 (Month) 1961 (Year)

2. Time of day: 12 (Hour) 30 (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) Middletown, (City or Town) Ohio (State or Country)

Additional remarks: _____

5. How long was object in sight? 1 (Hours) _____ (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)
b. Cloudy	b. Cloudy

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

ATIC FORM FEB 60 164 This form supersedes ATIC 164, 13 Oct 54.

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?

No, about the same brightness as a 2nd magnitude star

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?

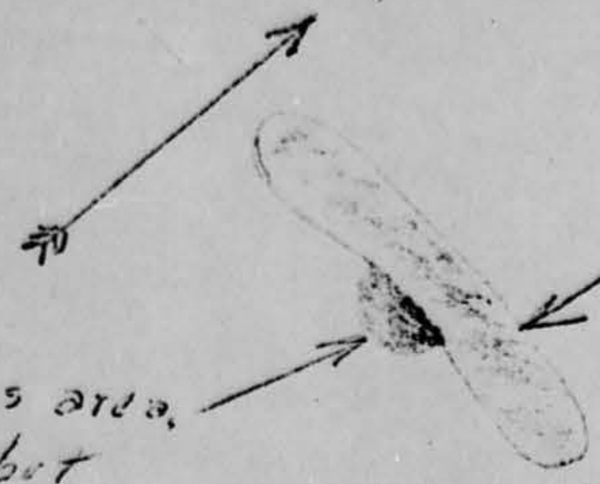
a. Eyeglasses	Yes	(No)	e. Binoculars	Yes	(No)
b. Sun glasses	Yes	(No)	f. Telescope	(Yes)	No
c. Windshield	Yes	(No)	g. Theodolite	Yes	(No)
d. Window glass	Yes	(No)	h. Other _____		

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

a. Sound None

b. Color Red, with flashes of Green, Blue and 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.



This area is Predominatly red, but appears Green, blue and White at times. In the telescope this area appears to be burning.

No light from this area. It looks black, but the outline can be seen in the telescope.

Appears as a star to the Naked eye.

18. The edges of the object were:

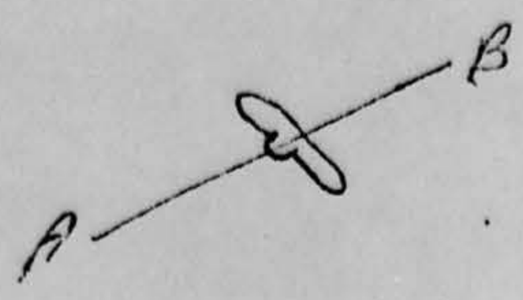
(Circle One): a. Fuzzy or blurred
(b. Like a bright star) Naked eye
(c. Sharply outlined) in telescope
d. Don't remember

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.



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

Twice the size of the Planet Jupiter when Viewed with a telescope.

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?

All of it if viewed with one eye.

23. Did the object disappear while you were watching it? If so, how?

No

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.

a large balloon with one half of it burning and flame shooting out to the sides to four times the diameter of the balloon.

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?

Looking for the Wilsons Comet.

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).

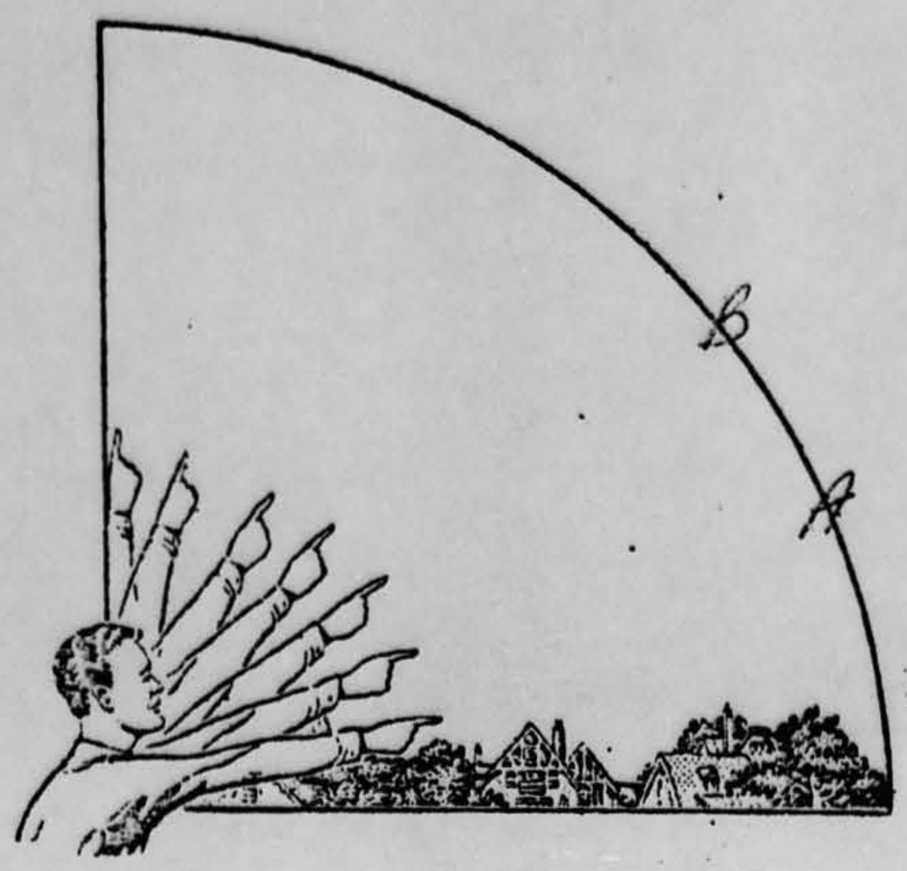
31.1 When it first appeared:

a. From true North 30 degrees.
b. From horizon 15 degrees.

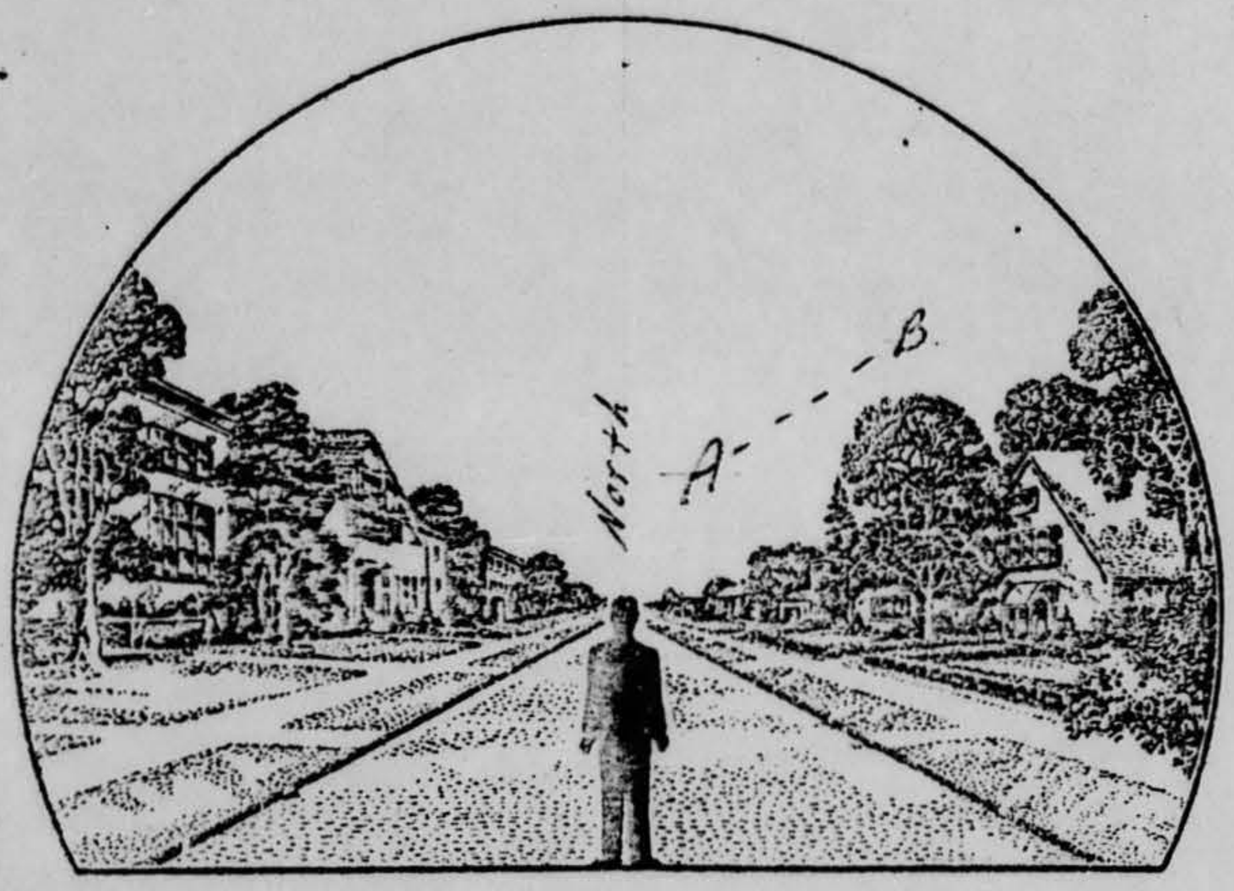
31.2 When it disappeared:

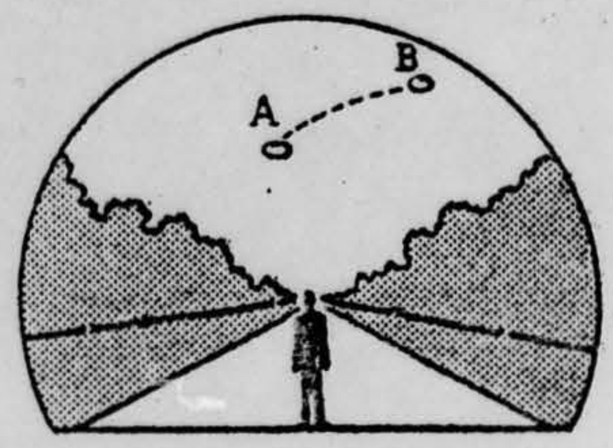
a. From true North 45 degrees.
b. From horizon 30 degrees.

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.





8-6-61

OFFICIAL FILE COPY
TD-E

5 SEP 1961

TD-E/Major Friend/vw/69216
UFO Sighting

Mr. [redacted]
Middletown, Ohio

Dear Mr. [redacted]

Your letter reporting the sighting of a UFO has been forwarded to the Foreign Technology Division. It does not contain sufficient information for a valid conclusion; therefore, request you complete the attached form and return it in the attached self-addressed envelope as soon as possible.

Sincerely

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

5 Sep 61

2 Atchs
1. ATIC Form 164, 2 cys
2. Self-addressed envelope

COORDINATION: TD-E Robert J. Friend DATE 1 Sept 61
Major Robert J. Friend

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?

15	8	1961	Middletown Journal
Day	Month	Year	
24	8	1961	Public Information Officer W.P.A.F.B.

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:

Mrs. [redacted]
Middletown, Ohio

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?

It is a satalite in orbit around the earth, as I stated in my letter. I believe it is too large to have been put in orbit by either the U.S.A. or Russia. I believe it is an astroid that has approached the earth at correct speed and angle to be pulled into orbit.

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? 15,000 – 18,000 m.P.H.

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? 52,000 – 65,000 miles

41. Please give the following information about yourself:

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

ADDRESS [redacted] Middletown, (City) ____ (Zone) Ohio (State)

TELEPHONE NUMBE [redacted]

Age 40 Sex m

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

42. Date you completed this questionnaire: 7 (Day) 9 (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 Print)

SIGNATUR [redacted]

DATE 9/7/1961

(Do Not Write in This Space)

CODE:

at 0:30 hours August 6, 1961 while searching for Wilsons Comet, that had been visible in the Northeast, I saw an objet that appeared to be something other than a star. I got it in my telescope and it moved out of view. I picked it up three or four more times and the same thing happened. Then I knew it was moving. I checked the position I first saw it, with a compass and protractor and watched it for an hour. Again I checked it's position and found it had moved approx. 15°. Since it moved toward the southeast I knew it was not a star.

Since the first sighting, I have continued to view the objct, and if clear night I have sighted it perhaps as many as twenty-five times in the past thirty two days.

as I stated in my letter to the Public Information Officer at W.P.A.F.B. it can be seen any clear night. At first it appeared at 12:30 A.M. After four weeks it has changed so as to appear at 10:30 P.M. From this I conclude that it takes 23 hrs. 55 min. and 42 sec. to orbit. I can not remember hearing of a satelite being put in orbit that required this much time to orbit and be visible to the naked eye. Therefore, I am trying to determine what it is.

September 6, 1961 I observed the object with a lense on the telescope, on which I had mounted cross hairs. I observed the planet Jupiter with the same lense and found that Jupiter covered only half as much lense area. From this, I figure the object in orbit must be about 28 mile long. To arrive at this, I figured a speed of 18,000 M.P.H. to orbit which would place it at an altitude of appox. 65,000 miles.

Have some of your staff watch for it between 10:00 and 10:30 P.M. the first clear night and they also will see it. It always appears 30° east of magnetic north and moves toward the south east. With a 100 power or better telescope they can observe what I sketched on page 3 of this form.

[redacted]
August 22, 1961

Office of Public Information
Wright - Patterson Air Force Base
Dayton, Ohio

Gentlemen:

During the past two weeks I have been visualy observing an object in orbit around the earth. I first saw it at 00:30 hours on august 6,1961. Since that time I have seen it some ten times. I have been able to determine that it takes about twenty-four hours for it to orbit. It travels about fifteen degrees per. hour.I see it every clear night. It always comes up about fifteen degrees east of magnetic north and moves toward the southeast. I followed it;s course Wed. night August 16, for three a nd one half hours and checked it's traveled distance at fifty two and one half degrees, This further proves it's time to orbit as twenty four hours.

I do not remember hearing of a satalite being put in orbit that would take this long to orbit. Also if it takes twenty four hours to orbit and is traveling close to eighteen thousand miles per. hour, to stay in orbit, it would be some sixty five thousand miles above the earth. If it is at this altitude, it must be something very large, because it appears about as bright as a second magnitude star.

I wonder if you have any information as to what it is. If so I hope you will let me know.

Yours Tru[redacted]

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?

6 (Day) 8 (Month) 1961 (Year)

2. Time of day: 12 (Hour) 30 (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) Middletown (City or Town) Ohio (State or Country)

Additional remarks: _____

5. How long was object in sight? 1 (Hours) _____ (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)
b. Cloudy	b. Cloudy

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

ATIC FORM FEB 60 164 This form supersedes ATIC 164, 13 Oct 54.

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?

No, about the brightness of a 2nd magnitude star.

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?

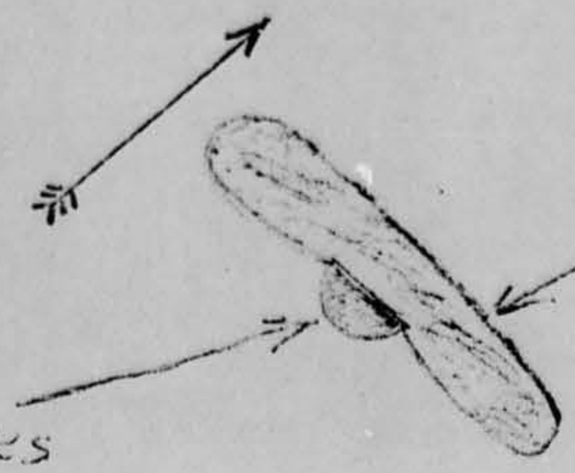
a. Eyeglasses	Yes	(No)	e. Binoculars	(Yes)	(No)
b. Sun glasses	Yes	(No)	f. Telescope	(Yes)	No
c. Windshield	Yes	(No)	g. Theodolite	Yes	(No)
d. Window glass	Yes	(No)	h. Other _____		

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

a. Sound Noise

b. Color Red with flashes of white, Green and blue

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.



No light from this area. It looks Black, but the outline can be seen, in the telescope.

This area is predominatly red, but appears green, blue and white at times. In the telescope, this area appears to be burning.

To the naked eye it appears as a star.

18. The edges of the object were:

(Circle One): a. Fuzzy or blurred
b. Like a bright star Naked eye
c. Sharply outlined IN telescope
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.

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

About twice the size of the Planet Jupiter-Viewed in a Telescope.

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?

All of it, sighting with one eye.

23. Did the object disappear while you were watching it? If so, how? No

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.

A large balloon, with one side burning and flame shooting out from center line of balloon, to four times the diameter of the balloon.

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 looking for the Wilson Comet

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).

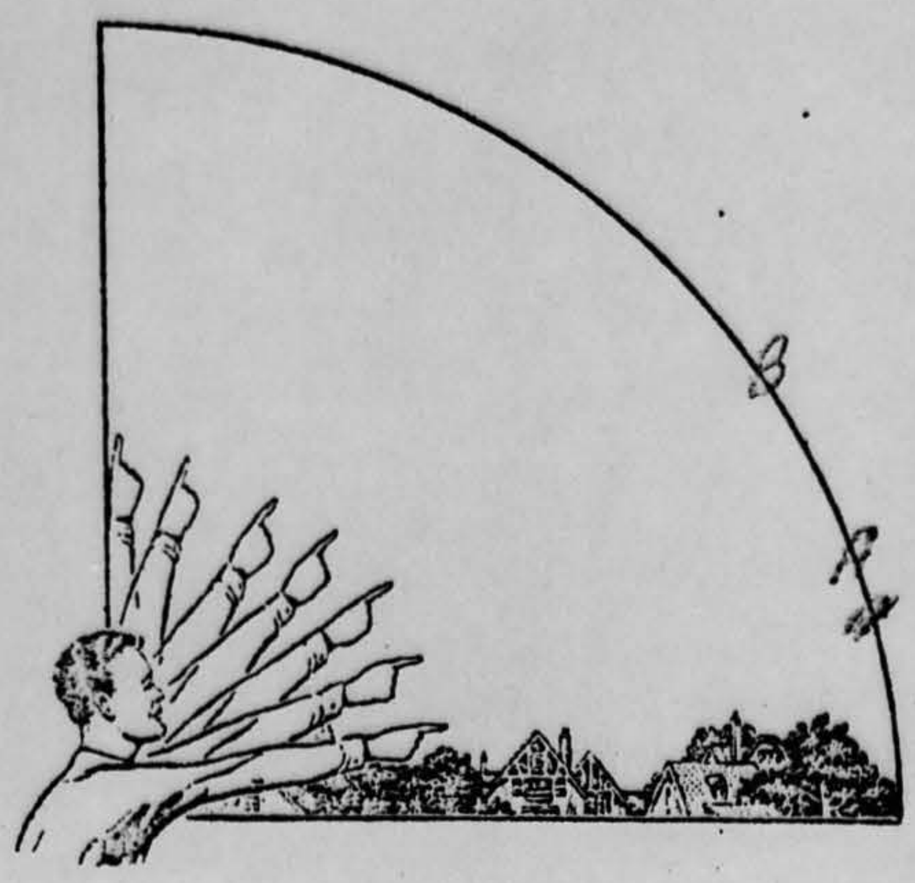
31.1 When it first appeared:

a. From true North 30 degrees.
b. From horizon 15 degrees.

31.2 When it disappeared:

a. From true North 45 degrees. When I stopped observing.
b. From horizon 30 degrees. It was still visible.

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.