

PROJECT 10073 RECORD CARD

1. DATE <p>31 Dec 61</p>	2. LOCATION <p>Dayton, Ohio</p>		12. CONCLUSIONS <input type="checkbox"/> Was Balloon <input type="checkbox"/> Probably Balloon <input type="checkbox"/> Possibly Balloon
3. DATE-TIME GROUP Local <u>0430</u> GMT <u>a310930Z</u>	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		<input type="checkbox"/> Was Aircraft <input type="checkbox"/> Probably Aircraft <input type="checkbox"/> Possibly Aircraft
5. PHOTOS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. SOURCE <p>Civilian</p>		<input type="checkbox"/> Was Astronomical <i>SIRIUS</i> <input checked="" type="checkbox"/> Probably Astronomical <input type="checkbox"/> Possibly Astronomical
7. LENGTH OF OBSERVATION <p>45 min</p>	8. NUMBER OF OBJECTS <p>1</p>	9. COURSE <p>Stationary</p>	<input type="checkbox"/> Other _____ <input type="checkbox"/> Insufficient Data for Evaluation <input type="checkbox"/> Unknown
10. BRIEF SUMMARY OF SIGHTING Objt viewed by witnesses magnitude -1.6. Witnesses reported viewing objt at 270°. Witnesses placed objt directly in middle of their drawing of how objt appeared, this would tend to indicate that objt was almost due W. Home of witnesses faces E and bathroom window is on W side, this too would indicate that objt is W. Star set for Dayton area at time witness reported that objt disappeared. Sirius is brightest star (apparent) in our heavens, and due to this being just before it passed below horizon, star was probably distorted somewhat due to atmospheric refraction. All available evidence indicates that objt viewed by witnesses was probably bright star Sirius.			11. COMMENTS was probably bright star Sirius at 220° az, but this was probably closer to 270°.

UFO ANALYSIS SHEET

15

Location DAYTON, OHIO

Date (Local) 31 DEC '61 Hour (Local) 0430

Hour (Z Time Group) 31/0930

Satellite: (Det 5 ATIC, Ext 3279)

Astronomical Phenomena (Meteor, Comet, Planet, etc) POSSIBLY SIRIUS

Radar Analysis (AFCIN-4E1) N/A

Natural Phenomena (Ball Lightning, etc) ✓

Aircraft, Balloons, Airships, etc

Other

Evaluation of Source Reliability UNKNOWN

Analysis and Conclusions: THE OBJECT VIEWED BY THESE WITNESSES WAS PROBABLY THE BRIGHT STAR SIRIUS, MAGNITUDE -1.6. THE WITNESSES REPORTED VIEWING THE OBJECT AT 220° AZIMUTH, BUT THIS WAS PROBABLY CLOSER TO 270°. THE WITNESSES PLACED THE OBJECT DIRECTLY IN THE MIDDLE OF THEIR DRAWING OF HOW THE OBJECT APPEARED, THIS WOULD TEND TO INDICATE THAT THE OBJECT WAS ALMOST DUE WEST. THE HOME OF THE WITNESSES FACES EAST AND THE BATHROOM WINDOW IS ON THE WEST SIDE, THIS TOO WOULD INDICATE THAT THE OBJECT IS WEST. THE STAR

SET FOR THE DAYTON AREA AT
THE TIME THE WITNESS REPORTED
THAT THE OBJECT DISAPPEARED.
SIRIUS IS THE BRIGHTEST STAR
(APPARENT) IN OUR HEAVENS,
AND DUE TO THIS BEING
JUST BEFORE IT PASSED BELOW
THE HORIZON THE STAR WAS
PROBABLY DISTORTED SOME DUE
TO ATMOSPHERIC REFRACTION.

ALL AVAILABLE EVIDENCE
INDICATES THAT THE OBJECT
VIEWED BY THESE WITNESSES
WAS PROBABLY THE BRIGHT
STAR SIRIUS.

Friend.

ASTRONOMY

Impressive Stellar Display

Brilliant winter constellations shining on December evenings include Orion, Canis Major and Taurus. The planets Jupiter and Saturn are visible early, James Stokley reports.

► WITH THE ARRIVAL of December the brilliant constellations of the winter evening are now in full view. Orion and his neighbors, which occupy a region of the sky that has more bright stars than any other area of similar size, shine in the southeast, as shown on the accompanying maps.

These depict the heavens as they look about 10 p.m., your own kind of standard time, at the first of December, an hour earlier at the middle of the month and two hours earlier at the end.

A good place to start is with the three stars in a row (now nearly vertical) that form the belt of the warrior, which is the way that Orion was pictured on the old star maps. These stars are high in the southeast. To the left, and a little higher, is Betelgeuse, while brilliant Rigel is to the right and below the belt.

Directly below Orion is Lepus, the hare, a relatively faint group, but to the left of this creature is Canis Major, the great dog, with the star called Sirius. It is also known as the dog star, and is the brightest star that we can see in the nighttime sky. Even though its present low altitude causes considerable reduction in its light on account of absorption in the atmosphere, Sirius still shines with great splendor.

Canis Minor Stands in the East

Over toward the east, a little higher than Sirius, is Procyon in Canis Minor, the little dog. And above this group is the constellation of Gemini, the twins, in which are two bright stars, Castor and Pollux. (These appear on the map of the northern sky.)

Above Orion is Taurus, the bull, with the bright star Aldebaran (red in color) marking the animal's eye. To the left of Taurus (also on the northern sky map) is Auriga, the charioteer, with Capella as the brightest star.

Low in the northwest is Vega, about all that is now visible of the constellation of Lyra, the lyre. Vega is of the first magnitude—the brightest—but its low altitude causes a diminution of its light, as with Sirius. Similarly dimmed is Deneb, in Cygnus, the swan, which is above Vega.

Directly north, about half way from the horizon to the zenith, is Polaris, the pole star, which is part of Ursa Minor, the little bear. Ursa Major, the big bear, is a little lower and to the right, in a poor position, as it always is at this time of year. But higher than Polaris, and toward the left, you can see Cassiopeia, the queen, whose five main stars now form a letter M.

Andromeda, who was Cassiopeia's daughter according to mythology, is above her mother. Directly overhead stands Perseus, the champion, who rescued the princess

when she was chained to a rock and a sea monster was about to devour her. The star marked Algol is not notable for its brightness, but because it is a famous variable star. Every 2 days 21 hours, approximately, it fades to about a third of its normal brightness, taking about five hours to dim and about five more to return to its original state. Actually, there are two stars, one dark, which regularly passes in front of its bright companion and partially eclipses it.

No planet is visible in December at the times for which the maps are drawn, but earlier in the evening—until about three hours after sunset—Jupiter shines brightly in the southwestern sky. It is in the constellation of Capricornus, the horned goat. This is next to Aquarius, the water carrier, which does appear, low in the west. Saturn, considerably fainter, is lower and farther to the right. It sets about half an hour earlier.

On Thursday, Dec. 21, at 9:20 p.m. EST (8:20 CST, 7:20 MST and 6:20 PST), the sun reaches its farthest south for the year. At this moment it will be directly over the Tropic of Capricorn, above a point near the city of Rockhampton, on the northeast coast of Australia. In the Northern Hemisphere this is the winter solstice, marking the generally recognized beginning of winter. But in Australia and other countries of the

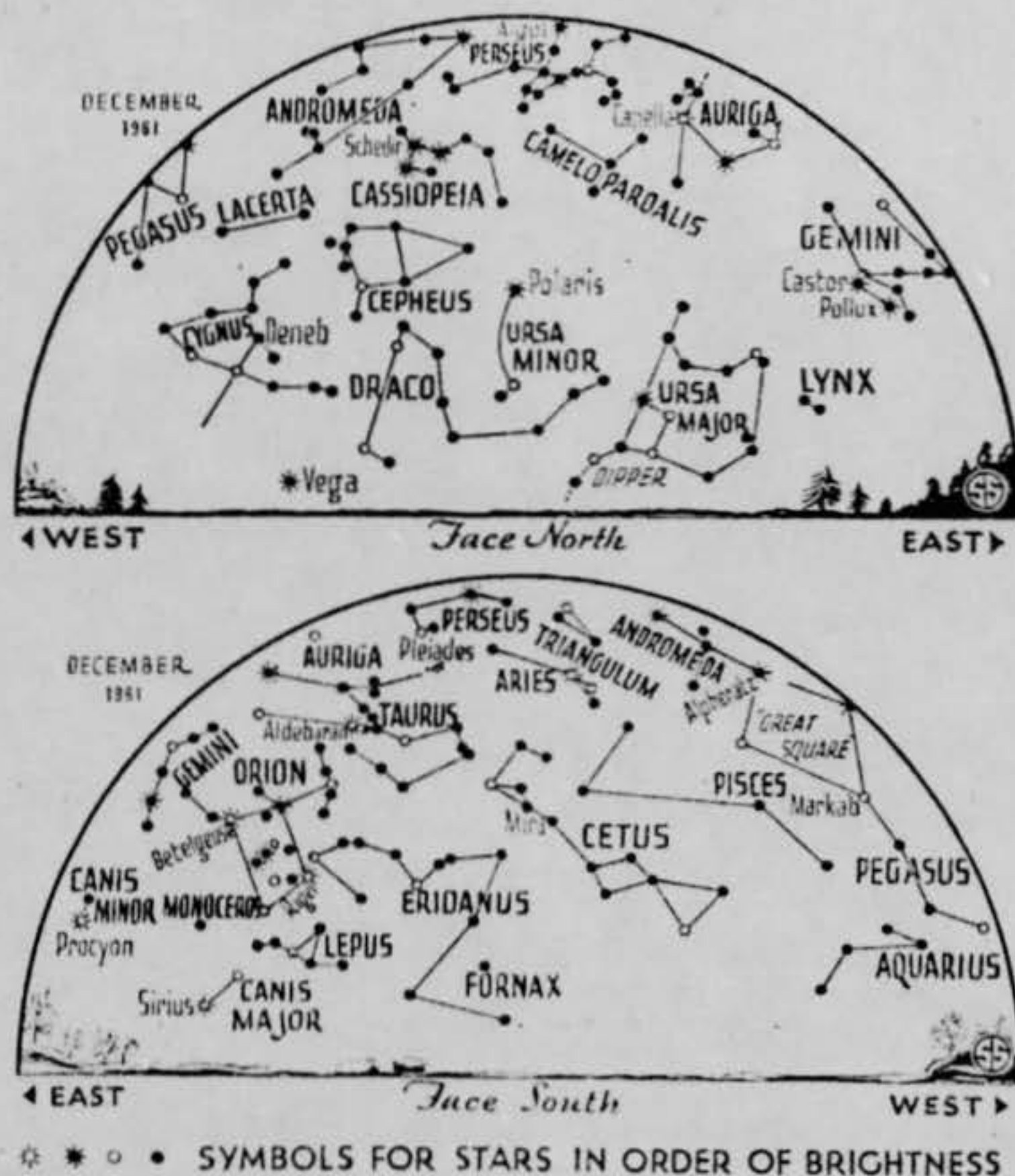
Southern Hemisphere it is the beginning of summer.

On Dec. 21, as seen from the U.S., the sun rises far to the south of the eastern point of the horizon. Similarly, it sets well to the south of due west. Its noon-day height is the lowest of the year. Consequently it has only a short path above the horizon, and a long one below, which means that this is the shortest day of the year, and the longest night.

Knowing this, you might suppose that on the 21st the sun would rise later than any other day, and set earlier. But it does not! The earliest sunset comes from Nov. 30 to Dec. 13. Then, at 40 degrees north latitude, it sets at 4:35 p.m. if you are on the central meridian of your time zone. (That is, at 75 degrees west longitude for Eastern time, 90 degrees for Central, 105 degrees for Mountain and 120 degrees for Pacific.) To the west of these meridians, by your watch, it would be later; to the east, earlier. On Dec. 21, the sun sets at 4:38 p.m., and rises at 7:18 a.m.

The latest rising, at 7:22 a.m., comes from Dec. 30 to Jan. 11, when the sun sets from 4:43 p.m. to 4:55 p.m. In other words, the earliest sunsets come several days before the solstice, while the latest sunrises come several days later. Why?

The reason lies in the fact that the sun is not entirely satisfactory as a clock. Centuries ago, the sundial was the most common timepiece. Noon came when the sun was directly south, with the shadow of the gnomon aimed due north. But the sundial



sometimes runs fast, sometimes slow, because of the way the earth revolves around the sun. It indicates what is called apparent time. As clocks came into use, "mean" time was introduced, which is based on an average, or mean sun, that does run at the same rate throughout the year.

At the beginning of November, mean time is about 15 minutes slow compared to apparent time; that is, the sun is 15 minutes early. After that—during December—the clock gains rapidly on the sundial. In mid-February, the sun will be almost 15 minutes late. The difference between mean and apparent time is called the "equation of time"; it is the number of minutes and seconds that you must add to or subtract from the mean time indicated by the clock to get the corresponding apparent or sundial time.

On Dec. 6, approximately midway in the earliest sunset period, the equation of time is plus 9 minutes 11 seconds; on Dec. 21, plus 2 minutes 10 seconds, and on Jan. 5, approximately midway in the latest sunrise period, minus 5 minutes 6 seconds. Now let us alter the times of sunrise and sunset on these dates to give it in apparent time, and we have:

	<i>Sunset</i>	<i>Sunrise</i>
Dec. 6	4:44 p.m.	7:16 a.m.
21	4:40 p.m.	7:20 a.m.
Jan. 5	4:44 p.m.	7:17 a.m.

Now the latest sunrise and the earliest sunset do occur on the shortest day—the day with the least time between the sun's rising and setting.

In other words, the sun performs according to its own kind of time, not the arbitrary and artificial kind of time that man has found most convenient to regulate his activities.

Celestial Time Table for December

Dec.	EST	
5	2:02 a.m.	Algol (variable star in Perseus) at minimum brightness
7	6:52 p.m.	New moon
	10:51 p.m.	Algol at minimum
10	7:00 p.m.	Moon passes Saturn
	7:40 p.m.	Algol at minimum
11	9:00 a.m.	Moon passes Jupiter
	7:00 p.m.	Moon nearest; 228,900 miles from earth
13	early a.m.	Meteors seen radiating from constellation of Gemini
14	1:00 p.m.	Mars behind sun
	3:06 p.m.	Moon in first quarter
16	3:00 a.m.	Mercury behind sun
21	7:42 p.m.	Full moon
	9:20 p.m.	Sun farthest south; winter commences in Northern Hemisphere
25	3:46 a.m.	Algol at minimum
27	2:00 p.m.	Moon farthest; 251,500 miles from earth
28	12:35 a.m.	Algol at minimum
29	10:57 p.m.	Moon in last quarter
30	9:24 p.m.	Algol at minimum

Subtract one hour for CST, two hours for MST, and three hours for PST.
MST, and three hours for PST.

December 2; Springfield, Ohio--About 10:45 p.m. Carol S. Bennett and her mother observed a reddish object moving across the sky. After the UFO stopped high overhead, Miss Bennett observed it with a 15-power telescope. Although still appearing red to the unaided eye, the UFO looked like a steel gray ball through the telescope: one side was dark gray, the other light gray. A more detailed report is expected.

NO CASE (INFORMATION ONLY)

3 Dec 61
Sacramento, Calif

SOURCE: SAUCER NEWS, Mar 62

Here's an unusual item from Sacramento, California, dated December 4th, 1961: A Mather Air Force Base jet chased a "blinding flash," believed to be a large meteorite, over northern California on the night of December 3rd. The flaming object finally "apparently" dipped into the Pacific Ocean. Sacramento area law enforcement officials and residents had reported a "bright red ball, as big as a house, with a flaming tail." These reports led to the jet chase.

No Case (Information Only)

6 December 1961
Southwestern U.S.A.

THE A. P. R. O. BULLETIN

MARCH, 1963

Missile, Contrail or UFO? *No*

From Weatherville, and Eureka, California, from Burns, Oregon and Reno, Nevada came reports on 6 December 1961, of the observation of a westerly moving craft with a "tail" twice as long as itself. The object was officially explained as (1) a Thor missile launched from Vandenburg and (2) a vapor trail from a high altitude, high performance craft known to be flying in the area. Take your pick.

December 13; Danvers, Mass. -- Mrs. Wendell A. Burdham, teacher, and her daughter observed an elongated UFO which glowed white while hovering and appeared orange while moving. The UFO moved part of the time in a horizontal attitude, but occasionally tilted at an angle. No sound was audible.

1 - 31 JANUARY 1962 SIGHTINGS

<u>DATE</u>	<u>LOCATION</u>	<u>OBSERVER</u>	<u>EVALUATION</u>
Jan-Feb	Morgantown, West Virginia	[REDACTED]	Astro (METEOR)
Jan	Santurce, Puerto Rico	[REDACTED]	BALLOON
-2	West Germany	Military	INSUFFICIENT DATA
-3	Ohio - Indiana Area	Multiple	Astro (METEOR)
-4	Xenia, Ohio	[REDACTED]	Astro (METEOR)
-5	47.30N 172.30W (Pacific)	Military	SATELLITE
-5	33.21N 171.42W (Pacific)	Military	SATELLITE
-6	Adak, Alaska	Military	SATELLITE
-6	Humboldt, Kansas	[REDACTED]	Astro (METEOR)
-8	33.35N 176.40W (Pacific)	Military	SATELLITE
-9	4S 85W (ESE Pacific)	Military	Astro (METEOR)
-14	31.31N 171.52E (Pacific)	Military	SATELLITE
-15	Monroe, Louisiana	[REDACTED]	Astro (STARS)
-15	38.30N 74.20W (Atlantic)	Military	AIRCRAFT
-15	Las Cruces, New Mexico	[REDACTED]	Astro (METEOR)
-16	Vandalia, Ohio	[REDACTED]	AIRCRAFT
-17	Lynn, Massachusetts	[REDACTED]	Other (UNRELIABLE REPORT)
-22	Kirkville, Missouri	Multiple (RADAR)	BALLOON
-26	Miami, Florida	Multiple (PHOTO)	AIRCRAFT
-28	13.42N 144.20E (Pacific)	Military	Astro (METEOR)
-28	Bethel, Alaska	[REDACTED]	AIRCRAFT
-28	Morehead, Kentucky	[REDACTED]	Other (BIRDS)
-29	South Carolina - Puerto Rico	Multiple	Other (MISSILE)
-29 Jan-1 Mar	Canado, Arizona	Multiple	Other (MIRAGE)
-30	St. Paul, Minnesota	[REDACTED]	Astro (METEOR)
-31	34N 176W (Pacific)	Military	SATELLITE

ADDITIONAL REPORTED SIGHTINGS (NOT CASES)

<u>DATE</u>	<u>LOCATION</u>	<u>SOURCE</u>	<u>EVALUATION</u>
Jan	Universe	Science News Ltr	
1962	Fresque Isle, Wisconsin	[REDACTED] (ltr)	
5 Jan	Columbus, Ohio	News Clipping	
5 Jan	Weonsocket, R. I.	News Clipping	
7 Jan	Auburn, California	News Clipping	
9 Jan	Buenos Aires	News Clipping	
15 Jan	Jamaica	News Clipping	
15 Jan.	Beverly, Massachusetts	News Clipping	

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?

31 / Dec / 61
Day / Month / Year

2. Time of day: 04 / 30
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] / Dayton / Ohio
Nearest Postal Address / City or Town / State or Country

Additional remarks: _____

5. How long was object in sight?

_____ / 45 / _____
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
a. Bright
b. Cloudy

NIGHT
a. Bright
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

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? | <input checked="" type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Don't Know |
| b. Suddenly speed up and rush away at any time? | <input type="radio"/> Yes | <input checked="" type="radio"/> No | <input type="radio"/> Don't Know |
| c. Break up into parts or explode? | <input type="radio"/> Yes | <input checked="" type="radio"/> No | <input type="radio"/> Don't Know |
| d. Give off smoke? | <input type="radio"/> Yes | <input checked="" type="radio"/> No | <input type="radio"/> Don't Know |
| e. Change brightness? | <input checked="" type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Don't Know |
| f. Change shape? | <input type="radio"/> Yes | <input checked="" type="radio"/> No | <input type="radio"/> Don't Know |
| g. Flash or flicker? | <input checked="" type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Don't Know |
| h. Disappear and reappear? | <input type="radio"/> Yes | <input checked="" type="radio"/> No | <input type="radio"/> 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 | <input type="radio"/> Yes | <input type="radio"/> No | e. Binoculars | <input type="radio"/> Yes | <input type="radio"/> No |
| b. Sun glasses | <input type="radio"/> Yes | <input type="radio"/> No | f. Telescope | <input type="radio"/> Yes | <input type="radio"/> No |
| c. Windshield | <input type="radio"/> Yes | <input type="radio"/> No | g. Theodolite | <input type="radio"/> Yes | <input type="radio"/> No |
| d. Window glass | <input checked="" type="radio"/> Yes | <input type="radio"/> No | h. Other _____ | | |

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

a. Sound _____

b. Color Emits Red + Green Sparks

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? ONE

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?

2 X any large star

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?

unk.

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

Yes Passed behind hill

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.

NONE

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?

Noticed thru bathroom window

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

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

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

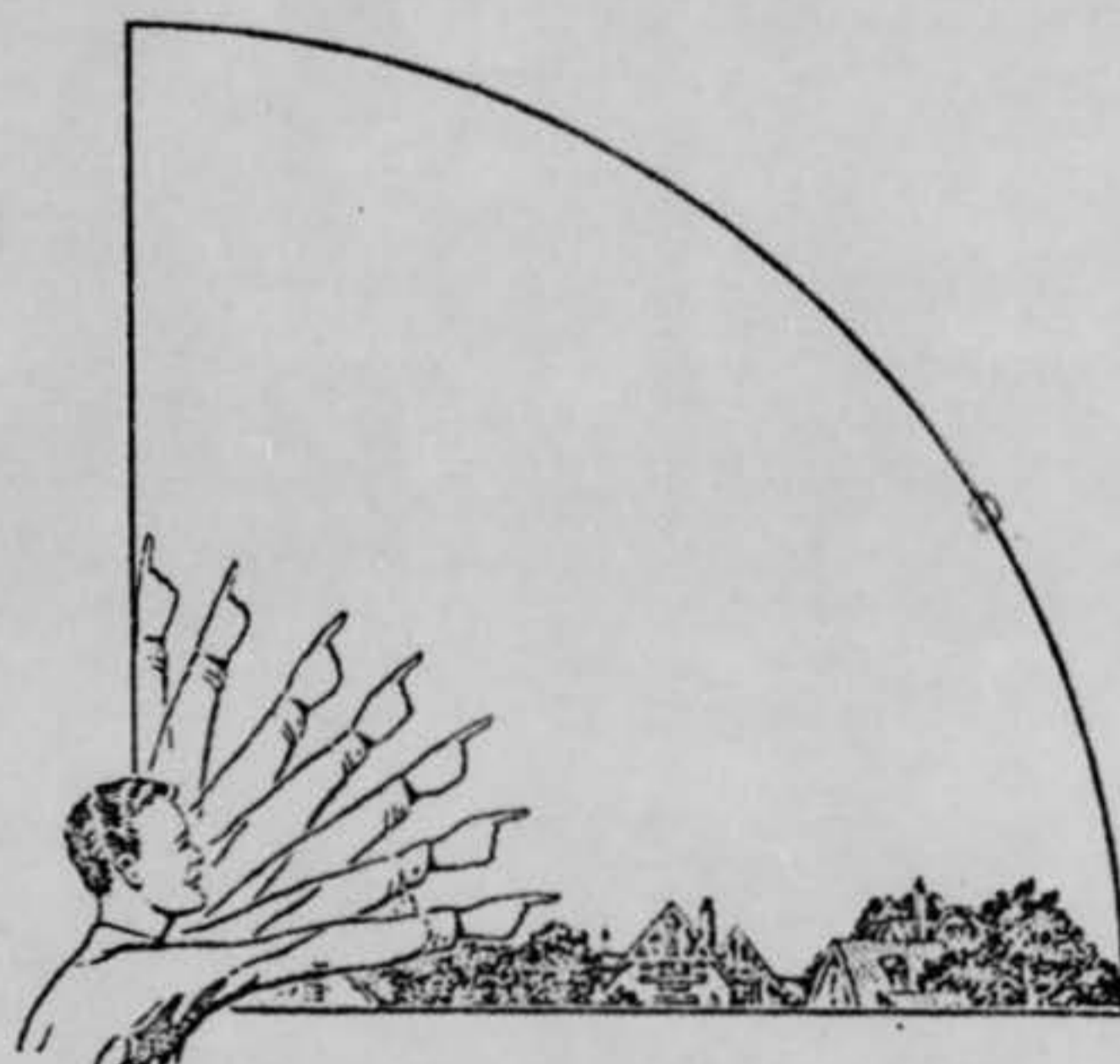
31.1 When it first appeared:

- a. From true North 220 degrees.
b. From horizon 45 degrees.

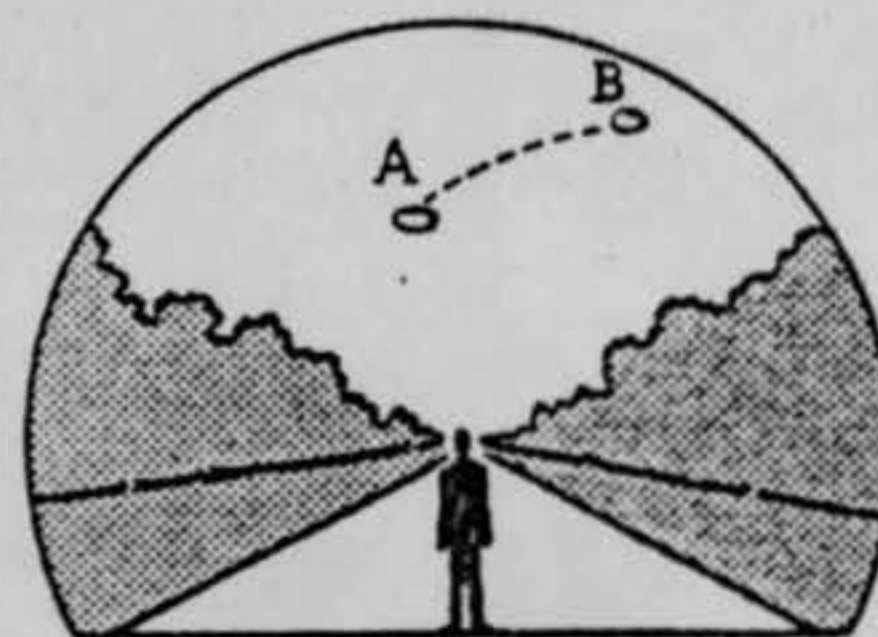
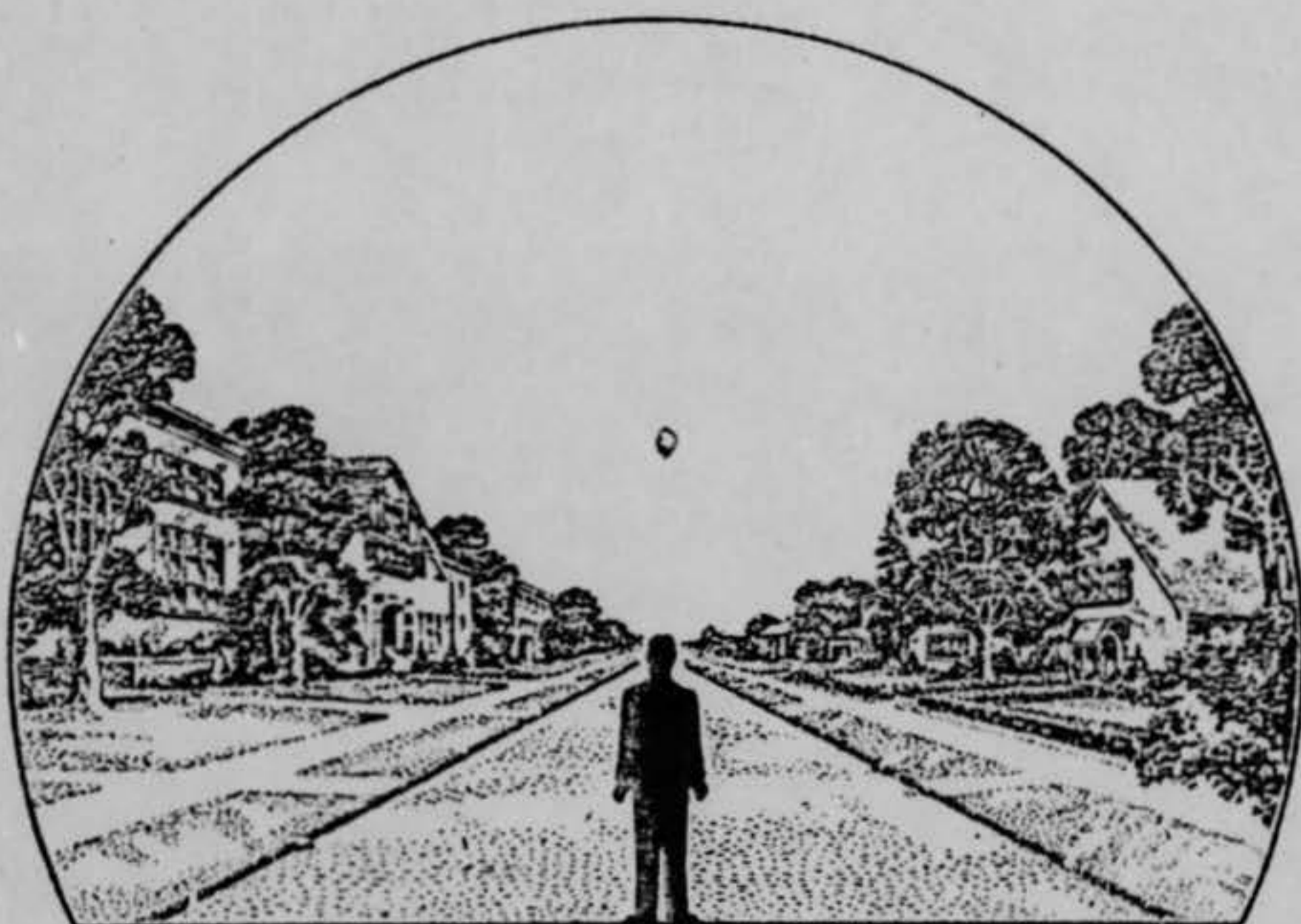
31.2 When it disappeared:

- a. From true North 220 degrees.
b. From horizon 50 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?

31 Dec 61
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:

Mr. [REDACTED]
[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?

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? _____

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? Unknown

41. Please give the following information about yourself:

NAME _____
Last Name First Name Middle Name

ADDRESS _____
Street City Zone State Dartmouth Ohio

TELEPHONE NUMBER _____

Age 35 Sex F

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

42. Date you completed this questionnaire:

31 Dec 61
Day Month Year