

PROJECT 10073 RECORD CARD

1. DATE 7 May 57		2. LOCATION Rendall, Iowa		12. CONCLUSIONS ☐ Was Balloon ☐ Probably Balloon ☐ Possibly Balloon ☐ Was Aircraft ☐ Probably Aircraft ☐ Possibly Aircraft ☒ Was Astronomical Comet ☐ Probably Astronomical ☐ Possibly Astronomical ☐ Other ☐ Insufficient Data for Evaluation ☐ Unknown	
3. DATE-TIME GROUP Local _____ GMT 07 0845		4. TYPE OF OBSERVATION ☒ Ground-Visual ☐ Ground-Radar ☐ Air-Visual ☐ Air-Intercept Radar			
5. PHOTOS ☐ Yes ☒ No		6. SOURCE Civ			
7. LENGTH OF OBSERVATION 1/2 hour		8. NUMBER OF OBJECTS 1		9. COURSE obj. jumped around.	
10. BRIEF SUMMARY OF SIGHTING 1 obj. round, size of dime, color-blue. Obj. observed through binoculars for 1/2 hr. obj. seemed to jump around and did not dissapear.				11. COMMENTS it is quite obvious from discription of obj. & obs. observation with binoculars this sighting was a large star or planet. POSSIBLE ALERO REXAND COMET OBSERVATION	

07/0845Z

Witness

ATTC

070557-01

19
2/1/64

3-4X20

100

WPH22 WPD138 YME10 1KFA119KFG071FGK004

RR RJEDEN RJEDWP RJEPHQ

DE RJEDKF 1GK

R 081700Z

FM COMDR 788TH ACWRON WAVERLY AFS IA

TO RJEDEN/COMDR ENT AFB COLO SPRINGS COLO

RJEDKF/COMDR 20TH ADIV RICHARDS GEBUR AFB MO

RJEDWP/COMDR AIR TECH INTELL CENTER WRIGHT PATTERSON AFB OHIO

RJEPHQ/DIRECTOR INTELL HQ USAF WASH D C

BT

/U N C L A S S I F I E D/788-08-E-01/IAW AFR 200-2: UNFOB

- | | | |
|-------------|--------------------------|---------------------|
| 1. A. ROUND | 2. A. BRIGHT SPOT IN SKY | 3. AM GROUND VISUAL |
| B. DIME | B. NE OF POSITION | B. BINOCULARS |
| C. BLUE | C. DID NOT DISAPPEAR | C. N/A |
| D. ONE | D. OBJECT JUMPED AROUND | |
| E. N/A | E. DID NOT DISAPPEAR | |
| F. N/A | F. ONE HALF HOUR | |
| G. NONE | | |
| H. NONE | | |
| I. NONE | | |

PAGE TWO RJEDKF 1GK

4. A. 07/0845 5. A. N/A 6. A. A [REDACTED], IOWA

NW RAILROAD DEPOT AGENT

D. NIGHT

B. N/A

7. A. CLEAR 8. A. NONE 9. A. NONE

B. N/A

C. UNLIMITED

D. NONE

E. NONE

F. NONE

10. A. NONE 11. A. NONE 12. A. NONE

CAPT DONALD J. SEMELBERGER ASST. OPERATIONS OFFICER

BT

08/173Z MAY RJEDKF

ASTRONOMY

Await Brilliant New Comet

➤ ASTRONOMERS around the world are anxiously waiting for their first glimpse of a comet that may rival or exceed Halley's Comet of 1910 in brilliance.

Observers in the Southern Hemisphere will have the first crack at seeing the comet as it starts drawing away from the sun after April 8. Astronomers in the Northern Hemisphere will have to wait until toward the end of April for their first look at Comet Arend-Roland.

Known also as comet 1956-h, it was discovered by S. Arend and M. Roland on photographs taken at the Royal Observatory, Uccle, Belgium, on Nov. 8, 1956. At that time, the comet was a diffuse object of magnitude 10, too faint to be seen without a telescope. Since then, many observations have been made by astronomers around the world, and several orbits have been computed.

The magnitude Comet Arend-Roland will have when it is again seen is not known definitely. Although it is expected to be quite bright, predictions of a comet's magnitude are notoriously uncertain. Whether it will, in fact, make as spectacular a heavenly display as Halley's Comet will not be known until Comet Arend-Roland is again visible.

The reason is that passage near the sun affects the internal constitution of a comet, and sometimes a comet brightens much more than is expected. This was the case with Halley's Comet.

The comet is scheduled to reach the point in its orbit closest to the sun on April 8, astronomers at the U. S. Naval Observatory in Washington report. At that time, its distance from the sun will be about 30,000,000 miles, or about one-third the distance of the earth from the sun. Its distance from the earth will be about 85,000,000 miles at the same time.

During March and the first part of April, the comet's apparent position in the sky will be too close to the sun to permit observations. After mid-April, however, the comet will move rapidly northward in the sky. Then it will appear very low in the northwest sky after sunset, between the constellations of Andromeda and Aries, the ram.

Its brilliance will fade rapidly as it climbs in the sky, and the object is expected to disappear from naked-eye view by the first of June, although it will continue to be visible through a telescope for a few more weeks.

On April 22, the comet will be in the constellation, Triangulum, the triangle, very close to the position where it was first spotted five and one-half months previously.

Images of the comet have since been found on photographs taken on Nov. 7, one day earlier than the original discovery. These photographs were made by S. Kaho of the Tokyo Observatory for research connected with variable stars.

Science News Letter, April 6, 1957

Comet's Tail Explained

➤ THE STRANGE SUNWARD tail of the brightest naked-eye comet since Halley's, Comet Arend-Roland, consisted of small particles seen edge-on, an American astronomer reports.

Comet Arend-Roland, first sighted last November by two Belgian astronomers, was seen by millions about the end of April when it shown brightly in the northwest sky. It startled many by having two tails, a conventional one pushed away from the comet's core by sunlight, and a surprising one, a long slender jet pointed directly toward the sun. (See SNL, May 11, p. 303.)

Dr. Fred L. Whipple, director of the Smithsonian Astrophysical Observatory, Cambridge, Mass., says "no extraordinary" theory is needed to account for the growth of the sunward tail by more than 10,000,000 miles in a few days and its rapid decline. The tail "almost certainly" resulted from the concentration of debris driven out of the comet by the sun's heat, then strewn over an area in the orbital plane.

When viewed at an angle, Dr. Whipple reports in *Nature* (June 15), the material could not be observed easily. However, when seen edge-on, as it was when the earth crossed the plane of the comet's orbit on April 25, the material showed up clearly as a line of considerable intensity.

The sunward jet of Comet Arend-Roland developed from a diffuse fan-shape on April 22 to a long narrow spike covering many millions of miles on April 25. By April 29, the jet disappeared because the particles were too far apart to be seen after the earth had moved out of the plane of the comet's orbit.

Dr. Whipple reports that the fine debris

spread out in the plane of the orbit and seen as the sunward tail was ejected from the comet's central part or nucleus.

Comets are believed to be a swarm of small and widely separated solid bodies held loosely together by mutual attraction, a flying gravel bank paying a brief visit to the sun's vicinity.

Science News Letter, June 29, 1957

RADIO ASTRONOMY

Watch Radio Waves From Comet Rivaling Halley's

► THE COMET Arend-Roland predicted to rival or outshine Halley's in brightness is being scanned for radio waves. (See p. 250.)

The Government's largest radio telescope, a sensitive, 50-foot antenna at the Naval Research Laboratory in Washington, is tuned in at a frequency near 1667 megacycles, and aimed at the comet's expected position in the sky.

The Naval Research Laboratory scientists are looking for the hydroxyl group, OH, in the comet's tail. This group has been seen optically in comet tails, and is predicted to emit radio waves at about 1667 megacycles. If the hydroxyl is found, it will be the first time that its radio waves have been detected from any heavenly object.

Science News Letter, April 20, 1957

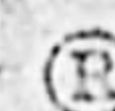
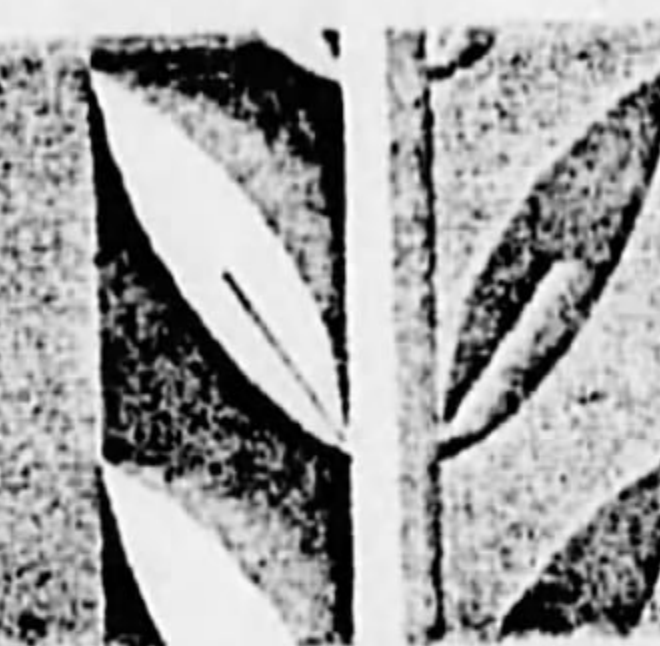


May 11, 1957

VOL. 71, NO. 19

PAGES 289-304

SCIENCE NEWS LETTER



THE WEEKLY SUMMARY OF CURRENT SCIENCE

ASTRONOMY

Comet Has Its Picture Taken in Blue Light

See Front Cover

➤ COMET AREND-ROLAND, now visible in the northwestern sky is shown on the cover of this week's SCIENCE NEWS LETTER. The photograph was taken in blue light with the five-inch Ross Camera at Georgetown University in Washington. Exposure time was 10 minutes at 9:20 P.M., EDT, on the evening of April 29th. The faint vertical line near the center of the photograph results from a flaw in the film.

The tail of the comet, when it first was sighted after passing close to the sun, extended about 25 degrees across the sky. (See SNL, May 4, p. 286.)

Science News Letter, May 11, 1957

Comet Arend-Roland

See Page 303

A SCIENCE SERVICE PUBLICATION

ASTRONOMY

Comet Remains Visible

Bright comet shares honors in the sky with four planets. A fifth planet, Mercury, will be visible as it crosses the sun's surface on May 5, one of 14 transits this century.

By JAMES STOKLEY

➤ AREND-ROLAND COMET, most conspicuous visitor of this kind since 1910, which came into view in mid-April, may still be seen in the western sky on May evenings. (See p. 249).

Rapidly drawing away from the sun, it is fading in brightness and by the end of May it will no longer be visible to the naked eye. But even then it should still be possible to pick it up with a pair of binoculars.

At the beginning of May the comet will be in the northwest, just above the constellation of Perseus, between the bright star Capella and the W-shaped group of stars marking Cassiopeia.

After that it will move up toward Ursa Major, the great bear, passing to the left of the pointers (the two stars in the great dipper which indicate the direction of the pole star) during June.

Its path is indicated on the accompanying maps, which show the brighter stars and planets as they will appear about 10:00 p.m., your own kind of standard time, at the first of May, an hour earlier in the middle of the month, and two hours earlier at the end.

Other Bright Planets

In addition to the comet, two planets will be shining brightly during May evenings. A third will be seen if you know where to look and a fourth may be glimpsed low in the west as the month closes.

Jupiter is the brightest of these. It stands high in the south, a little east of the meridian as the sun sets on May 1. After that it remains in view into the early morning hours. Jupiter, of magnitude minus two on the astronomical brightness scale, is in the eastern end of the constellation of Leo, the lion, close to the next-door group of Virgo, the virgin.

Saturn, the second planet, considerably fainter, but still comparable to a bright star, is low in the southeast, in Ophiuchus, the serpent-bearer.

The third planet is Mars, to the northwest in Gemini, the twins. This planet has now pulled so far away that it resembles a star of the second magnitude, and its low altitude makes it look even fainter.

Venus, the fourth planet, is not shown on the map. On April 14, it passed behind the sun and was, therefore, invisible. By May 1 it will be far enough to the east of the sun that it will remain above the

horizon for nearly half an hour after sunset, and will still be difficult to see.

By the end of May, almost an hour will elapse after the sun has gone down before Venus follows. Then, perhaps, you may begin to get a glimpse of the planet, very low in the west, at dusk.

Brightest May evening star is Vega, in Lyra, the lyre, in the northeast. Below it we find Cygnus, the swan, with the star Deneb, another body whose light is dimmed because of its low altitude.

High in the south, around Jupiter, are several bright stars. To the right is Regulus, part of Leo. This star is in a smaller group called the Sickle, with Regulus at the end of the handle, which points downward. To the left of Jupiter, in Virgo, stands Spica, and above this figure is Bootes, the bear-driver. Arcturus is the bright star in this group.

Low in the southeast, near Saturn, is another star of the first magnitude, Antares, in Scorpius, the scorpion. This, too, is greatly dimmed because it is so near the horizon.

Low in the west are a few of the bright constellations of winter, now making their last stand before they disappear for the summer months. There are Castor and Pollux, in Gemini, the group in which Mars appears. To the right is Auriga, the charioteer, with Capella. Canis Minor, the lesser dog, stands to the left, with Procyon its brightest star.

Of the five planets that are ever visible to the naked eye, four will be seen, though perhaps with a little difficulty, during May.

The fifth is Mercury, and although it will not appear in the evening sky, it will also

be visible during the month—but visible in a peculiar way.

Mercury circles around the sun once every 88 days, called its sidereal period, that is, its period of revolution with respect to the distant stars. However, it takes a longer time to catch up to the earth.

Suppose that on a certain date Mercury is between earth and sun. By the time it has made one revolution, 88 days later, the earth has moved nearly a quarter of the way around its orbit. Consequently, it takes 116 days, which is called its synodic period, before it is again in the same direction from the sun as the earth. This position is termed inferior conjunction. A few weeks before it gets there it has been to the east of the sun, when it has remained above the horizon after sunset, and may have been visible low in the west after sunset.

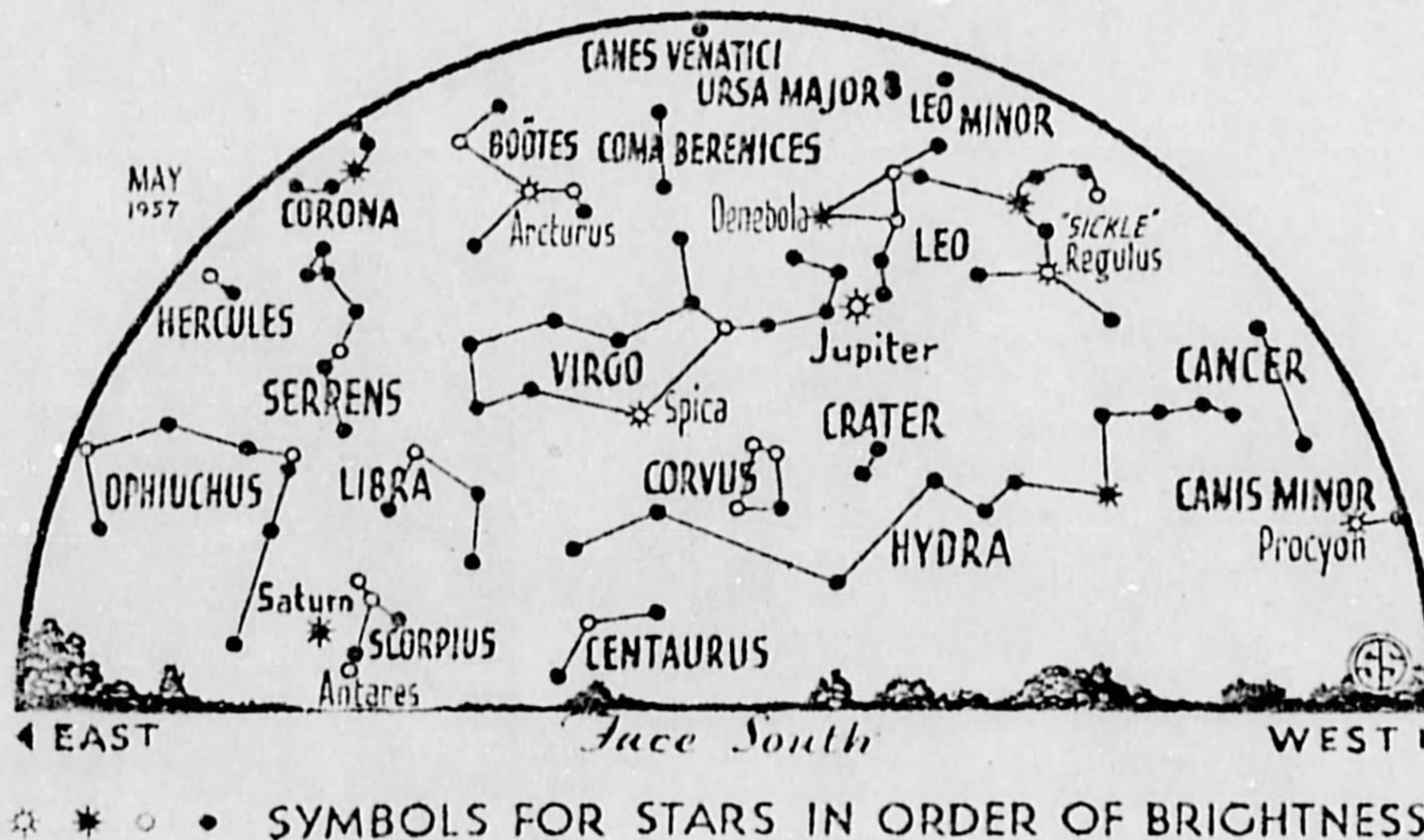
Generally, at inferior conjunction, Mercury does not come precisely between sun and earth, but rather it is north or south of the line from our planet to the sun. Occasionally, however, Mercury does come right in front of the sun, as we view it, producing what is called a transit.

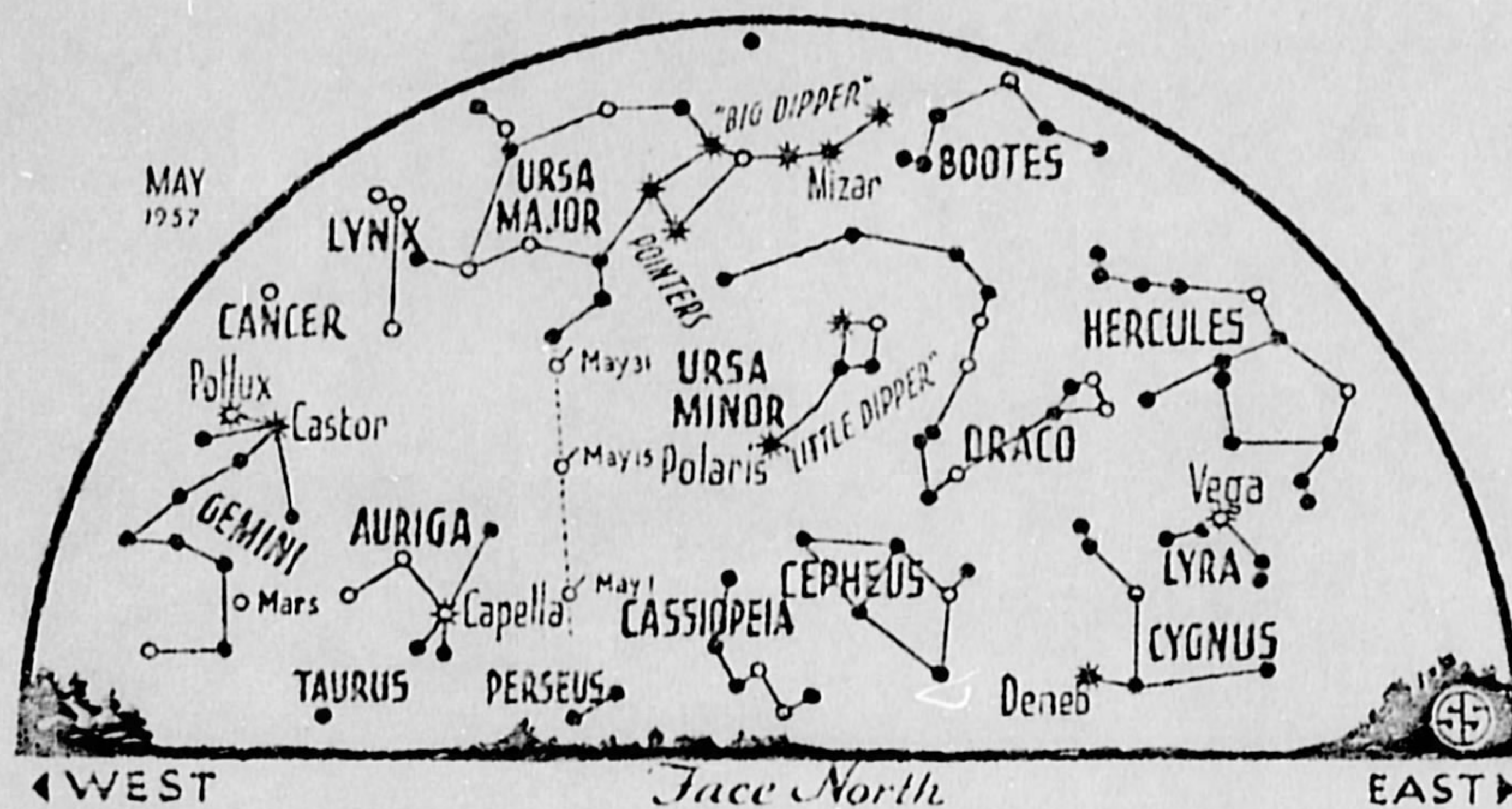
Transit of Mercury

Such an event occurs on May 5. It will take about two hours for the planet to pass completely across the solar disc. From the extreme eastern part of the nation, the transit cannot be seen. Over most of the country, the sun will set while the transit is in progress, but in the far west the entire transit will be observable.

Mercury is much smaller than the sun and, at the time of the transit, appears only about 1/160th the solar diameter. This means that it cannot be seen, as it crosses the sun's face, without some telescopic aid having a magnification of at least 100.

Of course, one should never look at the sun directly—particularly not with a tele-





scope—and special attachments are provided for telescope eyepieces to enable one to make solar observations without danger. Also, when a telescope is pointed to the sun, its image may be projected on a sheet of white paper held a little distance in back of the eyepiece.

With such aids as these, amateur astronomers all over the country will be busy watching the sun on the evening of May 5, to see Mercury crossing it.

Transit's Time Schedule

In New York the planet will start to enter the disc of the sun at 6:56 p. m., EST, just as the sun is about to set. St. Louis will see the beginning of the transit at 5:56 p. m., CST, and at 6:06 CST the planet will be fully in front of the sun. Astronomers around San Francisco will be watching the entrance of the planet on the sun's disc between 3:57 and 4:07 p. m., PST. At about 5:14 PST Mercury will be nearest the sun's center. At 6:19, in the Bay area, the planet will start across the sun's edge again, and at 6:29 PST the transit will be over.

Mercury will be moving from east toward the west so its passage across the sun will be downwards. The whole event will occur near the right-hand edge of the sun, or between two and three if you think of the sun as a clock-face.

During this century there are 14 transits of Mercury, two of which are grazing contacts—ten in November, four in May. The last occurred Nov. 14, 1953, but the last full transit at this time of year was on May 7, 1924. The next will occur Nov. 7, 1960, and the next May transit on the eighth in 1970.

Only Venus and Mercury can undergo transits, since they are the only planets nearer the sun than the earth.

Transits of Venus are far more rare, and there is none in the 20th century. The last happened on Dec. 6, 1882, and the next will come on June 8, 2004.

Since Venus is considerably larger than Mercury, as well as nearer to the earth, during a transit it can be seen in front of the sun without the aid of a telescope.

With smoked glass or other suitable protection for looking directly at the sun, Venus can be seen as a dark, round spot, moving slowly across the bright solar disc.

On May 13 there will be a total lunar eclipse, as the moon passes through the earth's shadow. It will be visible generally in Europe, Asia, Africa and over the Atlantic Ocean but will end 6:10 p. m., EST, before moonrise in the eastern U. S. and Canada.

However, the moon will remain partly in the earth's shadow until 7:17 p. m., and by then it will have risen for some points along the Atlantic Coast.

People at these locations may notice, just after the moon appears, a curious shading of its upper edge, where it has not yet emerged into full sunlight.

Celestial Time Table for May

MAY EST

3	1:07 p.m.	Moon passes Mars.
5	late afternoon	Transit of Mercury across face of sun (see text).
8	10:00 p.m.	Moon nearest, distance 229,200 miles.
9	1:39 p.m.	Moon passes Jupiter.
13	5:34 p.m.	Full moon, and total eclipse of moon, visible along eastern coast of U. S. (see text).
15	4:20 a.m.	Moon passes Saturn.
21	11:00 a.m.	Moon farthest, distance 251,200 miles.
	12:03 p.m.	Moon in last quarter.
29	6:39 a.m.	New moon.
30	4:56 a.m.	Moon passes Venus.

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

Science News Letter, April 20, 1957

THE FIELDS

METALLURGY

Metal Alloy Makes Powerful Magnets

➤ A SUPERIOR magnetic alloy, called Supermendur, has been developed from iron, cobalt and vanadium, H. L. B. Gould and D. H. Wenny of Bell Telephone Laboratories, Inc., Murray Hill, N. J., report in *Electrical Engineering* (March).

Its exceptional physical and magnetic properties were shown in standard tests in which the alloy established six new records for high magnetic characteristics, the engineers report.

It can increase the power output of a transformer coil by 30% and promises to be of value for transformers, high temperature applications, memory devices and telephone receiver diaphragms, they state.

Magnetic amplifiers using the alloy can be reduced in size by 20% and still furnish the same output. In high power electronic circuits the new material will, in some cases, reduce the number of amplification stages from two to one, and make further miniaturization possible.

The alloy is particularly valuable because it can be cold rolled like other soft magnetic materials into the thin gauges that are so vital to modern requirements, the engineers said.

Science News Letter, March 23, 1957

MEDICINE

Large Number of Dope Addicts Among Doctors

➤ ENOUGH DOCTORS to equal the entire output of one of the country's 76 medical schools turn into dope addicts every year, Dr. J. DeWitt Fox, Detroit, Mich., reports in the *Journal of the Michigan State Medical Society* (Feb.).

Warning all doctors not to overlook the menace in their own medical bags, Dr. Fox quotes Dr. Harris Isbell, director of the U. S. Public Health Service Hospital for addicts in Lexington, Ky., as saying that scarcely a week passes when a "physician who is a Demerol addict is not admitted to our institution."

Since Demerol, a newer pain killing drug, made its appearance, most new doctor addicts take to it rather than morphine, Dr. Fox reports.

Physician addicts fall into three classes: there are alcoholic physicians who relieve hangovers with opiates; tired doctors who habitually blot out fatigue with a narcotic; and doctors suffering pain from disease, who overdose themselves with opiates.

"The overly fatigued physician is all too common. He loses sleep several nights, receives another call, which he feels he cannot

make without a 'stimulant' to keep him going. He takes a dose of morphine, methadone, or Demerol, and goes ahead and makes his call. Finding such an escape a great relief he repeats it, until he too falls through the trap door into addiction," Dr. Fox explains.

However, there is always a serious emotional disorder in the background, which can be anything from a marital rift to income tax trouble.

"What every physician must remember is that he is human. Even though in his bag is an escape through a needle, he must never allow himself the pleasure of using it," Dr. Fox warned.

Most doctors need a good night's sleep, more vacation time, and release from tension. Without it, they are in greater danger from temptation than any layman, because of their easy access to the drugs.

"The outstanding feature of these cases of physician addicts appeared to be lacking of warning young doctors before they went out into practice," Dr. Fox said.

Every medical student and intern should have it drummed into him just as tavern owners tell their bartenders they will be useless once they start drinking themselves.

"It is time every doctor—you and me—and every medical student—be told the 'facts of life' when it comes to narcotic addiction," Dr. Fox warns his colleagues.

Science News Letter, March 23, 1957

PUBLIC HEALTH

TB Among Students Shows Sharp Decline

➤ IN THE PAST 15 years, the incidence of active and arrested cases of tuberculosis among college students has dropped off sharply.

This result is shown in a survey conducted at the University of California at Los Angeles.

The survey was conducted in the Student Health Service under the direction of Dr. Gertrude Huberty through a grant from the Los Angeles County Tuberculosis Association.

Tuberculin skin reaction tests were given to more than 2,000 entering students last spring. Reactions were correlated with chest X-ray results. Nineteen percent of the group had positive reactions. Only two of this group were found to be active cases.

A similar survey in 1940-41 resulted in 40% positive reactions and another in 1946-47 showed 65% positives.

The large percentage of positives in the latter survey was thought to be the result of the large influx of veterans, many of whom served in areas where exposure to the disease was frequent.

"Modern methods of tuberculosis treatment are so effective that students with active disease often lose but one semester," Dr. Huberty says. "They may return the next semester and continue their educations under chemotherapy which maintains them in a non-contagious state."

Science News Letter, March 23, 1957

PUBLIC HEALTH

Daily Requirements of Two B Vitamins Change

NEW "minimum daily requirements" for two of the B vitamins were proposed by the Food and Drug Administration in Washington.

The proposed regulation would set a minimum daily requirement for niacin for the first time, at 10 milligrams. It would also reduce the adult minimum daily requirement for riboflavin from two milligrams to one milligram.

The minimum daily requirements help protect consumers from exaggerated and misleading claims of the vitamin content on the labels on foods and drugs. When a manufacturer claims that his product contains a particular vitamin, he is required to show on its label how much of the vitamin it contains and the proportion of the minimum daily requirement it supplies for adults and children.

It was known in 1941 that niacin plays an important role in human nutrition, but until now there has been no general agreement on its minimum daily requirement, Dr. E. M. Nelson, Food and Drug Administration, U. S. Department of Health, Education and Welfare, reported.

The minimum daily requirement of riboflavin was set at two milligrams in 1941, Dr. Nelson said, but this was based upon rather limited evidence in the cure of ariboflavinosis, a disease caused by too little riboflavin in the diet.

Nutrition scientists are now generally agreed that the daily requirement may be met by one-half that amount, he said.

Science News Letter, March 23, 1957

MEDICINE

Temperature Affects Loss Of Injured Nerve Fiber

➤ A SMALL RISE IN TEMPERATURE can greatly increase the degeneration of animal nerve fibers after they are injured, Drs. H. J. Gamble, F. Goldby and G. M. R. Smith, St. Mary's Hospital Medical School, reported in *Nature* (March 9).

This temperature effect is important because one of the commonest methods for investigating pathways and connections in the nervous system involves studying the degeneration that takes place after experimental injury. It is essential to know how much time must elapse before it can be assumed that the surviving nerve fibers, normal in appearance, cannot have been affected by the injury, the researchers reported.

The effects of temperature were studied in lizard-like animals that adjust their body temperatures to that of the surrounding air. Animals kept at 68 degrees Fahrenheit showed the same amount of degeneration within only three days that was found after three weeks in animals kept 12 degrees cooler.

Science News Letter, March 23, 1957

ASTRONOMY

Mercury Seen at Dusk

Jupiter and Mars can also be seen during April. The first eclipse of the year, an annular eclipse of the sun, will occur on April 29. Naked-eye comet scheduled.

By JAMES STOKLEY

➤ MERCURY, smallest of the nine planets and nearest of them all to the sun around which they revolve, will make one of its rare appearances about the middle of April.

On the 15th it will be farthest east of the sun—"greatest eastern elongation" the astronomer calls it—and for a few days around then it will be seen near the western horizon just after sunset. Since at best it will set about an hour and three quarters after the sun, you will have to look for it as dusk gathers.

By the time the western sky is completely dark, Mercury will also have gone out of sight.

Because of this, Mercury does not appear on the accompanying maps, which show how the sky will look about 10 o'clock, your own kind of standard time, at the beginning of April. It will appear similarly about 9:00 p.m. at the middle of the month, and about 8:00 p.m. at the end.

Also not shown on the accompanying maps is the comet scheduled to be visible from the Northern Hemisphere in late April and May. It is predicted to blaze forth at zero magnitude, making it one of the most brilliant objects in the sky at that time.

If the comet lives up to expectations, it will be the biggest and most spectacular of its breed during the 20th century, brighter than Halley's Comet, last seen in 1910.

Known as Comet Arend-Roland after the two Belgian astronomers who discovered it, the object was first spotted on Nov. 8, 1956.

Since then, astronomers both here and abroad followed it with their telescopes until it traveled too close to the sun to be seen. By the end of April, it will be far enough away from the sun to be visible again.

Its brilliance will fade rapidly and it will disappear from naked-eye view by the first of June. During late April, the comet will appear very low in the northwest sky after sunset, between the constellations of Andromeda and Aries, the ram.

Comet Arend-Roland will reach its perihelion on April 8, when it will be only 29.7 million miles from the sun.

Two planets besides Mercury are shown. Brightest is Jupiter, which shines high in the south in the constellation of Virgo, the virgin. Jupiter is now so brilliant, about 15 times as bright as a typical star of the first magnitude, there will be little difficulty in locating it.

The other planet is Mars, still receding after the close approach that it made last September, so it has faded greatly. Look toward the west, and you can see it in Taurus, the bull, to the left of the bright star Capella, in Auriga, the charioteer. Mars, however, has the brightness of a star of the second magnitude.

Nine First Magnitude Stars

In addition to Capella, nine other bright stars (i.e., of the first magnitude) are now visible. Low in the southwest is Sirius, the dog star, part of Canis Major, the great dog.

To the right, directly west, is Orion, the warrior. Part of this figure is below the horizon, at the times for which our maps are drawn, but Betelgeuse is still visible, above the three stars that form his belt.

Farther to the right is Taurus, the bull, in which Mars now stands. Below the planet is Aldebaran, a first-magnitude star, although its low altitude causes it to be dimmed. Above Orion is the figure of Gemini, the twins, with Pollux, of the first magnitude, and Castor, of the second.

To the left of this group we find Procyon, in Canis Minor, the lesser dog. Still farther to the left, high in the southern sky, is Leo, the lion, with the bright star Regulus. This star, with a semicircle of stars just above, forms a little figure known as the Sickle. Regulus marks the end of the handle, which points downward.

High in the east is Bootes, the bear-driver, with brilliant Arcturus. Below this constellation we find Virgo, the virgin, with Spica, as well as Jupiter, a temporary visitor.

Finally, low in the northeast, Vega, part of Lyra, the lyre, is indicated. Even more than Aldebaran, its brilliance is dimmed by its low altitude, but later in the night, as

it climbs toward the south, you will be able to see it shining with accustomed glory.

By that time another planet will have appeared. Saturn, in the constellation of Ophiuchus, the serpent-bearer, rises in the east a little before midnight.

Venus, which has not been mentioned, passes behind the sun on April 14, so all month it is too nearly in line with that body to be seen.

Annular Eclipse of Sun

The first eclipse of the year occurs on April 29, but only in the northwestern United States, western Canada and Alaska will North Americans be able to see it.

This is an eclipse of the sun, not total but annular. Although the moon passes between the earth and sun, its distance from us is so great that its apparent diameter is not enough to cause it to cover the sun completely, as it does in a total solar eclipse.

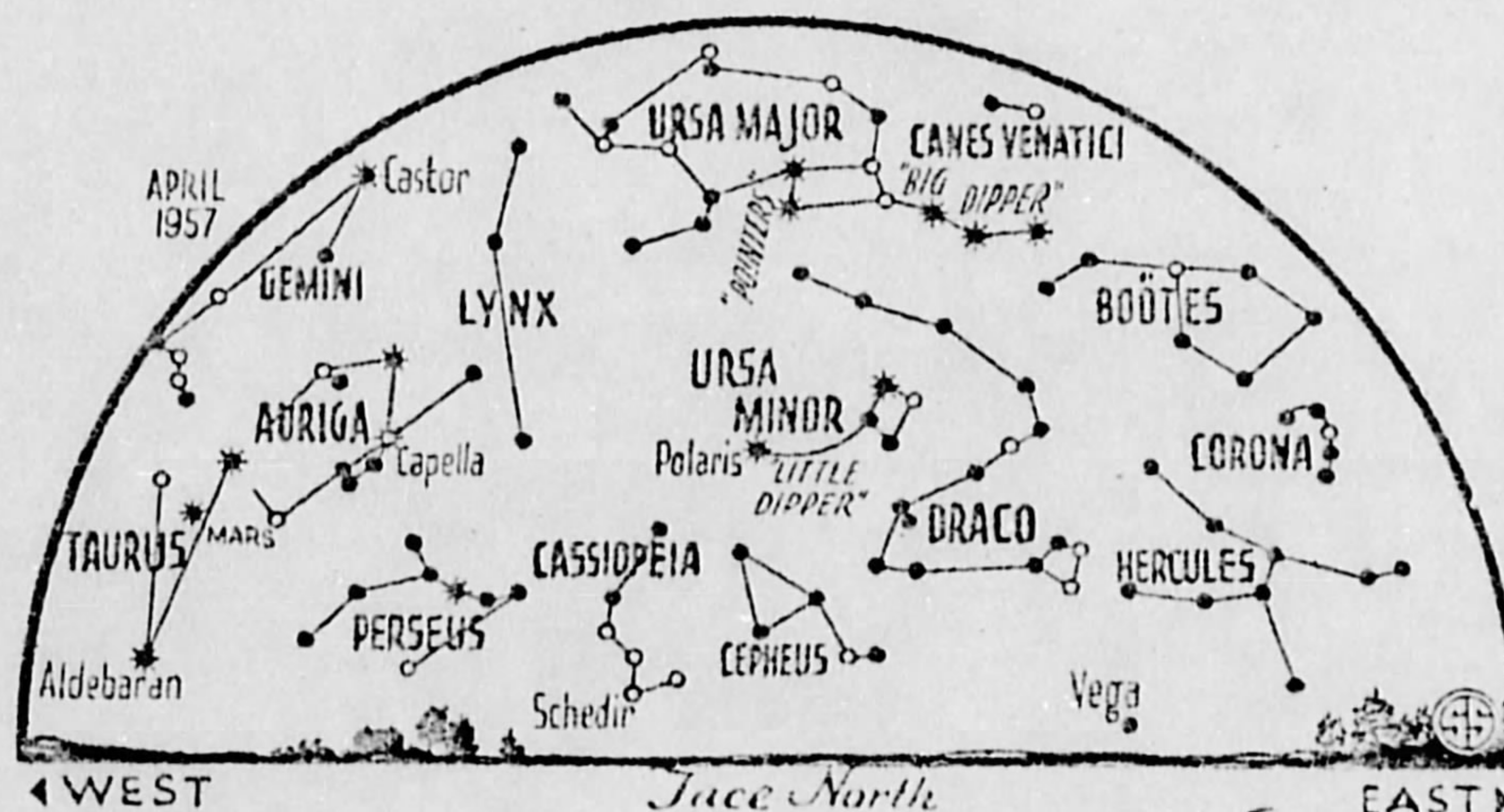
Instead, a ring of sunlight will remain visible around the dark lunar disc. To see this effect, one would have to be located along a curved area in the Arctic Ocean north of Russia.

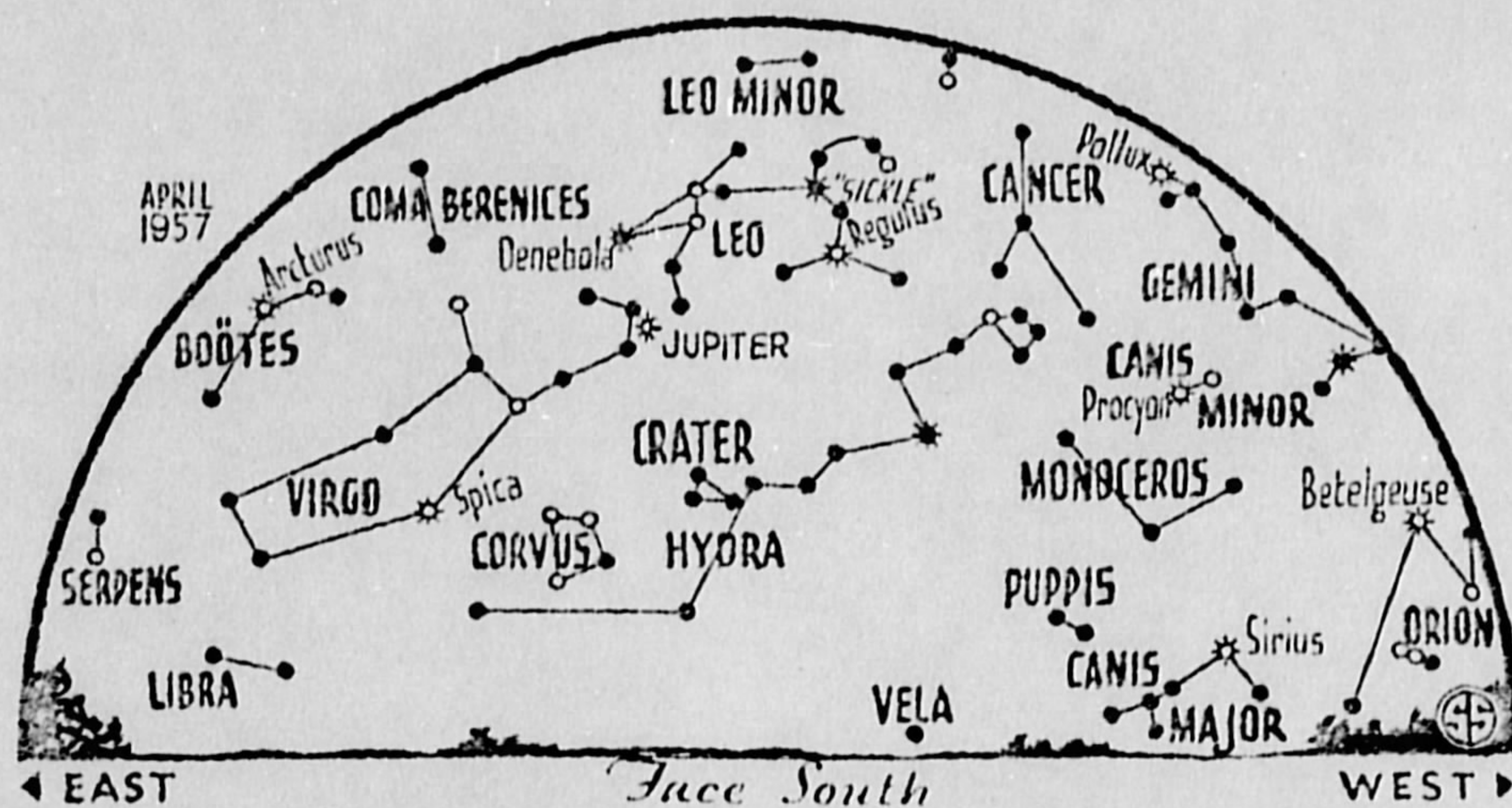
Over part of European Russia, most of Asia and northwestern North America there will be a partial eclipse, with the moon passing partly in front of the sun. At Seattle, for example, the eclipse will start at 5:05 p.m. PST, and end at 6:14 p.m.

At 5:40 the eclipse will be at its maximum, with 14% of the solar diameter covered, so it will not be a very large eclipse. At Anchorage, Alaska, it lasts from 2:01 p.m. to 4:02 p.m., Alaska standard time, with the maximum at 3:00 p.m. when almost half of the solar diameter will be covered.

Protection for Eyes

People who live in these areas, of course, should not try to look at the eclipse without adequate protection for the eyes. Smoked glass or several layers of over-





◊ * ◦ • SYMBOLS FOR STARS IN ORDER OF BRIGHTNESS

exposed photographic film should be used. Sun glasses or welder's goggles are not sufficient protection.

Mercury, which appears at the middle of April, has mean distance from the sun of only 36,000,000 miles, somewhat more than a third the earth's distance of 93,000,000 miles.

As it swings around the sun, it appears alternately to the west and east of that body. In the former case it moves ahead of the sun as they make their daily trip around the sky. Then it may appear just before sunrise, in the morning twilight. When east of the sun, as it is in April, it remains above the western horizon after the sun has set. However, this does not always bring it into our view.

When such an eastern "elongation" occurs in the autumn, it is not nearly as favorable for evening viewing as when it occurs in the spring.

In April this year conditions are almost at their best, so take advantage of your opportunity.

Even when Mercury does thus come into view, it never remains visible after twilight has faded and it is never seen very high in the sky, while the period over which it can be easily observed is not more than about a week.

The great Polish astronomer Copernicus, who showed that the planets revolve around the sun, is said never to have seen Mercury. Even at an elongation, the low-flying mists usually obscured it.

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

Science News Letter, March 23, 1957

Celestial Time Table for April

APRIL EST

- 4 10:41 p.m. Moon passes Mars.
- 7 3:32 p.m. Moon at first quarter.
- 11 8:00 p.m. Moon nearest, distance 226,100 miles.
- 12 9:02 a.m. Moon passes Jupiter.
- 14 7:09 a.m. Full moon.
- 8:00 a.m. Venus passes behind sun.
- 15 4:00 a.m. Mercury farthest east of sun.
- 17 9:41 p.m. Moon passes Saturn.
- 21 10:00 a.m. Neptune nearest, distance 2,724,000 miles.
- 6:00 p.m. Moon in last quarter.
- 23 4:00 p.m. Moon farthest, distance 251,500 miles.
- 29 6:54 p.m. New moon—partial eclipse of sun visible in northwestern North America.

Sgt. Weil:

Visiting Comet To Be Visible On Saturday

Clear skies permitting, a visitor from outer space will be visible at sunset Saturday.

The Arend-Roland comet reached its closest position to the sun on April 8, and now is outbound.

It should be sufficiently far enough away from the sun to be seen by the naked eye at sunset Saturday.

Its tail will be pointing away from the sun, and it should be as bright as the brightest star in the April sky.

The comet should be visible just above the horizon, slightly northward of due West, where the sun sets.

About May 1, the comet will have risen higher in the Western sky, passing between the constellations Capella and Cassiopeia, the "W" constellation.

The comet named for two Belgian astronomers who discovered it Nov. 8, 1956, should be visible for the rest of April and May.

ASTRONOMY

New Comet Will be Visible to Naked Eye

➤ A BRIGHT new comet will be visible to the naked eye in late April and early May.

It may shine at zero magnitude, making it one of the most brilliant objects in the sky at that time. Known as Comet Arend-Roland, the object was discovered on Nov. 8, 1956, a correction of the Nov. 6 date originally reported. (See SNL, Dec. 1, 1956, p. 345.)

Since then astronomers both here and abroad have followed it with their telescopes and now have sufficient observations to plot its future path in the sky.

Although it can be seen by persons in the Southern Hemisphere before dawn during the first half of April, people in the Northern Hemisphere will not be able to look at it until the end of April and the beginning of May, after sunset. Then the comet will have passed between the earth and the sun.

Its brilliance will fade rapidly and it will disappear from naked-eye view by the first of June. During the last part of April it will appear very low in the northwest sky after sunset.

Science News Letter, February 9, 1957

New Comet at end of April and first half of May. Will probably be reported as UFO's or "flying saucers" by some. This comet was only discovered three months ago. Stand-by for a flurry of saucer reports in April + May. E. Thompson

GETTING ACQUAINTED WITH ASTRONOMY

COMETS — I

AS OUR SUN drifts through space toward the constellation Hercules, it carries along an enormous cloud of comets, an envelope so extensive it reaches much of the way to the nearest star.

Practically none of the multitudes of objects making up this cloud resembles the traditional picture of comets. They do not have fuzzy comas or long tails. Instead, typical comets when far from the sun are relatively small solid objects. They are believed to be fluffy masses of frozen gases and ice mingled with some heavier materials, like loosely packed dirty snowballs miles in diameter. All of them are moving in more or less elongated paths around the sun.

Only when one of these snowballs penetrates into the inner parts of the planetary system does its appearance change. Solar heating evaporates its surface layers, forming a halo of gas and dust. As the comet approaches nearer to the sun, this shedding may proceed until we see that the small, bright nucleus is surrounded by a nebulous coma many thousands of miles across, with a tail millions of miles long, pointing away from the sun. Then, as the comet recedes, the tail and coma shrink and vanish, leaving only the nucleus. Since the ejected gas and dust have been permanently lost into interplanetary space, each time a comet passes near the sun its mass

is depleted. On a cosmic time scale, it is a temporary body.

Of the vast host of comets in our solar system, only a very small fraction pass near enough to Sun and Earth to become bright enough for detection. Since the dawn of history about 1,600 comets have been recorded with some certainty. The number is indefinite, partly because ancient writings often do not distinguish clearly between comets and novae.

During the present century, comets have been discovered at an average rate of five or six per year. One banner year was 1960, during which no fewer than 23 were under observation: eight previous discoveries, four new ones, nine returning periodic comets, and two "annual" comets (visible in all parts of their nearly circular orbits). Remarkably, observations of all 23 were obtained by Elizabeth Roemer with the U. S. Naval Observatory's 40-inch telescope in Arizona.

Nearly every year two or more bright comets are first recognized by amateurs with small telescopes. However, most new ones are relatively faint objects, picked up accidentally in the course of sky-mapping programs with fast, wide-field photographic telescopes. Since 1946 a systematic visual search has been maintained at Skalnaté Pleso Observatory in Czechoslovakia, with 25 x 100 binoculars. On the average, this highly successful program yields

The visual appearance of many comets is suggested by this Naval Observatory photograph of 1958e (Burnham-Slaughter) on November 10, 1958, four months before perihelion. Stars are trailed because the 40-inch telescope was guided to follow the moving comet during the 63-minute-long exposure. The comet was about 220 million miles from the sun.

one new comet per 200 hours of sweeping.

As soon as a newly discovered comet is reported to the astronomical information centers at Harvard and Copenhagen observatories, it receives a provisional year-and-letter designation. Thus the first one found in 1963, by the Japanese amateur K. Ikeya, became 1963a. The sixth detected last year on October 9th and called 1963f, is a faint periodic comet picked up on its 17th return since Halley discovered it in 1851.

Several years after discovery, those comets whose orbits are definitely known receive permanent Roman-numeral labels indicating the time order of their passage through perihelion. Thus 1960 I (initially called 1960b) was the first of the nine observed comets whose perihelion dates came that year.

After three or more accurate positions of a new comet have been measured at intervals of a few days, an approximate orbit can be computed. Normally three suffice, but not if the three points on the celestial sphere can be joined by a great circle. In this and certain other ambiguous cases, a fourth observation must be added.

Arend-Roland 1956h became one of the brightest comets in recent years. It was a conspicuous naked-eye feature in the evening spring sky of 1957. This photograph was taken on May 2-3 that year by a New York amateur astronomer, Charles Cuevas. At the time, he estimated the visual magnitude of 1956h as 3.5. This comet had an anomalous second tail pointing sunward, in the form of a long narrow spike, that was outstanding about April 25th, but less conspicuous when this picture was made.

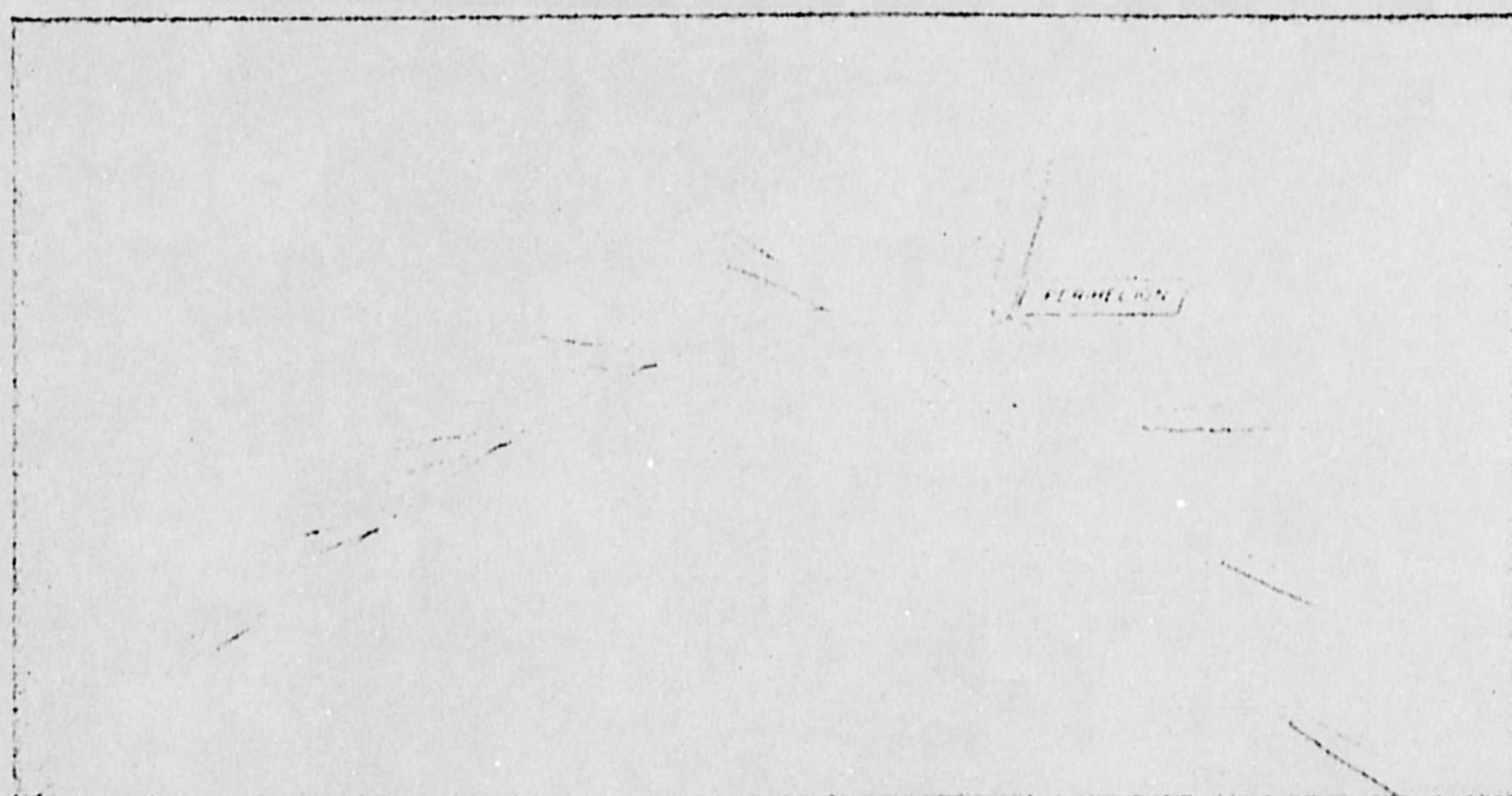
In these preliminary orbit calculations, it is assumed that the path around the sun is a parabola — always a good approximation for the time being. The parabola can be specified exactly by five numbers, which may be illustrated by Comet Kearns-Kwee 1963d:

This object was closest to the sun on October 28, 1963, at a distance of 2.5 astronomical units. Its orbit is in a plane inclined 9° to that of the earth's orbit. The intersection line of these two planes points toward heliocentric longitude 322° , marking the ascending node, or passage of the comet northward across the ecliptic. Finally, the angle in the comet's orbital plane is 113° from the ascending node to perihelion.

Nowadays, it is common for a comet to remain under observation for several months before it becomes too faint to follow. (Comet Stearns 1927 IV was tracked for four years before it was lost.) It is then possible to compute a definitive orbit, which utilizes all the positional measurements. In this calculation the shape of the orbit is determined, instead of being assumed parabolic.

Almost always, the orbit is highly elongated, with only a small arc covered by our observations. Halley's Comet, for instance, has a period of 76 years, but during its last return (perihelion was April 20, 1910) it could be observed only from September, 1909, to July, 1911. The path of Halley's Comet is an ellipse of eccentricity 0.967, so its distance from the sun ranges from 0.59 to 35.3 astronomical units. At present this famous object is still outside Neptune's orbit, but is traveling inward on its next return to the sun's vicinity in 1986.

Encke's Comet is notable for its short period of 3.3 years. Its perihelion point



The main tail of a comet points away from the sun. Radiation pressure of sunlight, as well as the solar wind, drives gases and dust outward from the head. Diagram from "Astronomie," by L. Rudaux and G. de Vaucouleurs.

is near the orbit of Mercury, while at aphelion it is nearly as distant as Jupiter from the sun. It just attains naked-eye visibility at favorable returns. Often Encke's Comet is said to have the shortest known period. However, the faint object 1949 III (Wilson-Harrington) has been assigned a period of 2.3 years. This poorly observed comet has never been seen since its discovery year.

Cometary orbital motions are greatly disturbed by the gravitational attractions of the planets, especially Jupiter. We may visualize a comet orbit as an ellipse that is constantly changing slightly in size, shape, and orientation; on the occasion of a near approach to Jupiter the alteration can be large and rapid. Very lengthy calculations are needed to follow the course of the comet step by step.

Nowadays electronic computers have made the large-scale calculation of comet

perturbations a much less formidable task. It is now feasible to trace the motion of a comet during many revolutions and through complex transformations. The results of one such study are reported on page 16 of this issue.

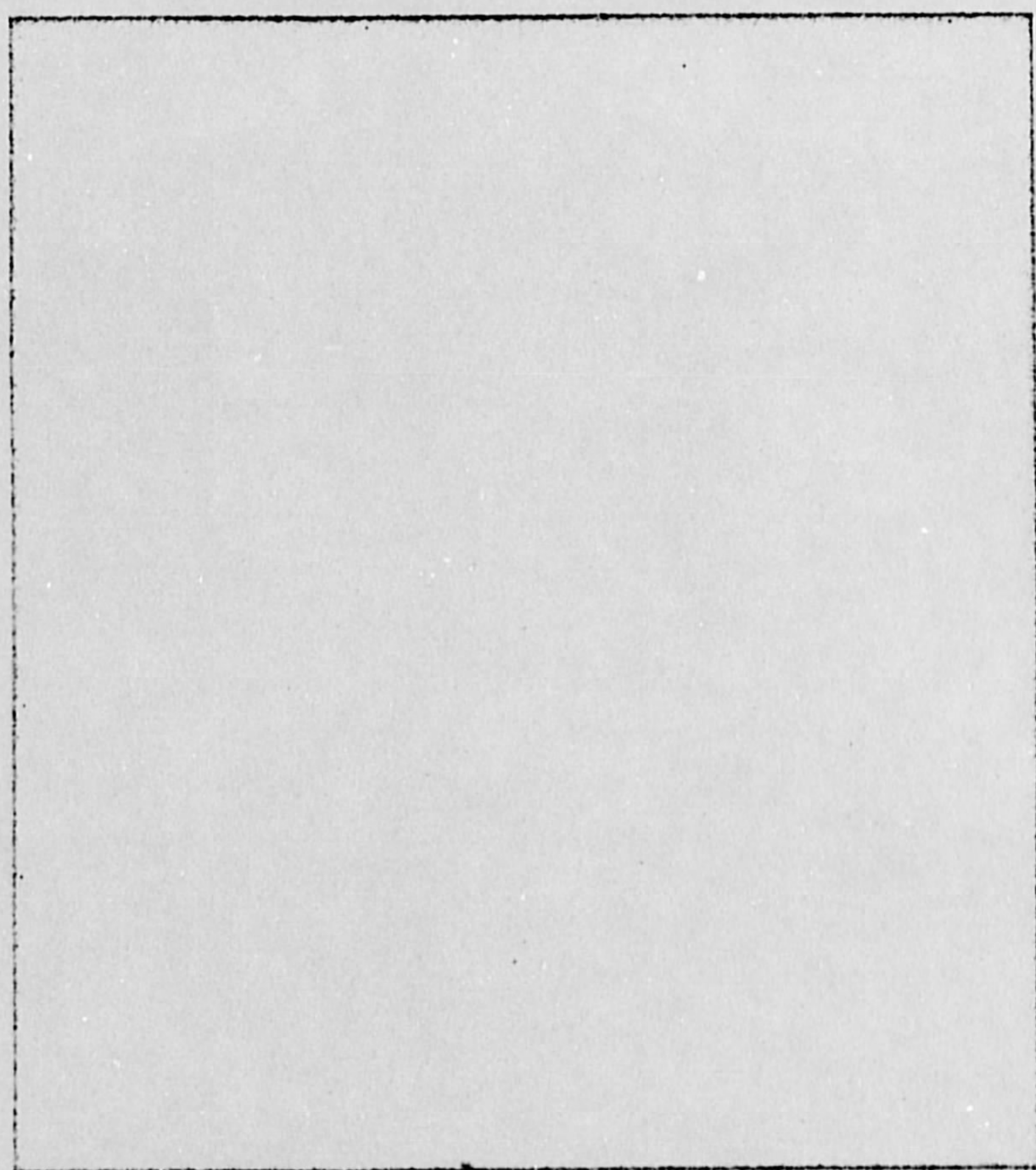
An important question is whether the comets that we observe have all originated within the solar system, or whether some are interlopers from interstellar space. There are, indeed, a small fraction of comets whose orbits appear to be hyperbolic rather than closed curves, but in any particular instance it is conceivable that the observed hyperbolic shape could have been imparted by planetary perturbations.

Hence it is necessary to compute backward, step by step, the path along which the comet approached the sun, taking accurate account of planetary perturbations. At a distance of, say, 100 astronomical units, before planetary perturbations have had an opportunity to act appreciably, the original shape of the orbit is found. Without any significant exceptions, it turns out that the original orbits are ellipses. Thus, all comets, or nearly all, are permanent members of our solar system.

An earlier attempt to settle this question failed for an interesting reason. Since the sun is moving about 12 miles a second toward Hercules, then more interstellar comets should tend to approach us from that direction than the opposite. More discoveries should take place in that half of the sky.

The catch to this idea is the nonrandom nature of comet discoveries. There are many more astronomers in the Northern Hemisphere than the Southern; comet hunters favor warm spring nights to winter ones; and the evening sky is better patrolled than the morning. In fact, the distribution of discovery points over the sky is almost entirely determined by these accidental factors.

(To be continued)



The head of Halley's Comet, in a four-minute exposure with the Mount Wilson 60-inch reflector on May 5, 1910. In this large-scale view, the small, bright nucleus is surrounded by several diffuse asymmetric envelopes. The coma appeared densest on the side facing the sun. This famous comet has been seen on at least 29 returns. One of the earliest extant comet pictures is contained in the famous Bayeux tapestry, showing the 1066 apparition of Halley's Comet.

No Case (Information Only)

April 1957
Oxnard AFB, California

Source: Satellite 1 Jun 57 (Richard Hall)

GCC OFFICIAL WATCHES UFO
Pasadena, Calif. April, 1957
(From Los Angeles Mirror News)

Shortly after midnight, a UFO was seen moving slowly overhead near Oxnard AFB by ~~the Los Angeles Mirror News~~ and citizens. ~~The object was in view~~ until 1:37 A. M. A similar object was seen floating over the San Gabriel Valley before midnight by GCC personnel including Les Wagner, a Mirror-News staff writer and T/Sgt. Dewey Crow. Wagner, an expert on aircraft identification, has been in charge of the air movement identification center of the GCC at Pasadena for 6 yrs.

Thinking it was a balloon, Wagner checked ~~with the Los Angeles Mirror News~~ the ~~Los Angeles Mirror News~~ Oxnard AFB, and the C. A. A. Everyone disclaimed the object. Radar failed to pick up the object in both instances.

→ NOTE: ALTHOUGH THE FOLLOWING OCCURRED ABOUT 10 YEARS AGO
WE HAD NO CONFIDENCE IN THE AIR FORCE AT THAT TIME
(UFO INVESTIGATION)

OFFICIAL U.S. AIR FORCE

Page 1

U.S. AIR FORCE TECHNICAL INFORMATION

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. 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~~ OBJECTS - plural
TWO (2)
A SUNDAY IN APRIL 1957
Day Month Year

2. Time of day: 10 : 30 APPROX.
Hours 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?

RALSTON ROAD AT WADSWORTH BY-PASS
Nearest Postal Address

ARVADA
City or Town

COLORADO
State or County

5. How long was object in sight? (Total Duration)

10-15 (EACH)
Hours Minutes Seconds

a. Certain
b. Fairly certain

c. Not very sure
d. Just a guess

5.1 How was time in sight determined? CONSIDERED ESTIMATE

5.2 Was object in sight continuously? Yes ☒ No

6. What was the condition of the sky?

DAY
a. Bright & CLEAR
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

UT 10 YEARS AGO, THE OCCURENCE IS STILL VIVID IN MEMORY.
EAT THAT TIME. PERHAPS YOUR OBJECTIVENESS HAS IMPROVED.
SO INVESTIGATION)

AIR FORCE UFO FORM

Page 1

Page 2

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. 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

10. The object appeared: (Circle One):

- a. Solid
- b. Transparent
- c. Vaporous (opaque)
- d. As a light
- e. Don't remember

11. If it appeared as a light, was it brighter than the brightest stars? (Circle One):

- a. Brighter
- b. Dimmer
- c. About the same
- d. Don't know

11.1 Compare brightness to some common object:

12. 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 _____

13. Did the object:

(Circle One for each question)

- a. Appear to stand still at any time?
- b. Suddenly speed up and rush away at any time?
- c. Break up into parts or explode?
- d. Give off smoke?
- e. Change brightness?
- f. Change shape?
- g. Flash or flicker?
- h. Disappear and reappear?

Yes	No	Don't know
Yes	No	Don't know
Yes	No	Don't know
Yes	No	Don't know
Yes	No	Don't know
Yes	No	Don't know
Yes	No	Don't know
Yes	No	Don't know

* APPARENTLY BY CHANGE IN ANGLE OF REFLECTION

** APPARENTLY BY CHANGE IN RELATIVE PLANE

Official U.S. Air Force UFO form c

Page 3

14. Did the object disappear while you were watching it? If so, how? *YES. THE OBJECTS (TWO) APPEARED TO DISAPPEAR, PROBABLY BECAUSE NEAR THE END OF OUR OBSERVATION WE WERE VIEWING THEIR THINNEST DIMENSION.*

15. 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: _____

16. 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: *(AND ABOVE) A COMMERCIAL AIRCRAFT (FOUR-PROP)*

17. Tell in a few words the following things about the object:
a. Sound: *NONE*
b. Color: *DEUTER* (POLISHED)*
** MY WIFE SAYS "BRUSHED SILVER"*

18. 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 (THEM) WITH STANDARD WOODEN KITCHEN MATCH. (A TELEPHONE POLE FOUR BLOCKS AWAY).*

19. 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 PROTRUSIONS OR VAPOR TRAILS. NO MARKINGS OR OTHER NOTICEABLE SHAPES ON THEIR SURFACES.*

(EDGES FUZZY)

I II III IV V

ILLUSTRATIONS DEPICT VARIOUS ANGLES OF VIEW BEFORE "DISAPPEARANCE"

20. Do you think you can estimate (Circle One)
IF you answered YES, then v

21. Do you think you can estimate (Circle One)
IF you answered YES, then h

22. Where were you located when (Circle One):
a. Inside a building
b. In a car ☒
c. Outdoors
d. In an airplane (type)
e. At sea
f. Other _____

24. IF you were MOVING IN A ***
24.1 What direction were you
a. North
b. Northeast
24.2 How fast were you moving
24.3 Did you stop at any time (Circle One)
** STOPPED AFTER*

25. Did you observe the object through
a. Eyeglasses
b. Sun glasses
c. Windshield ***
d. Window glass
** INITIALLY, THEN*

26. In order that you can give as many objects which, when placed up
NOTHING. THEY WERE SEEN BEFORE WHICH I THINK IS CONCERNED) AS IN FIG II, P.

Air Force UFO form continued

Page 3

APPEARED
EQUATION

tell what

tell what

d note how much of the
sighting, how much of
DARD WOODEN

any details of the object
now beside the drawing
MARKINGS OR
REMARKS.

ARRANGE

20. 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? ABOUT TWICE THE SPEED OF ANY AIRCRAFT THAT I HAVE SEEN BEFORE THE WARRING OF THE

21. 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? FOUR BLOCKS AT CARRY HOLLOW

22. 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

23. Where were you located when you saw the object?
(Circle One):
a. In the business section of a city?
b. In the residential section of a city?
c. In the countryside?
d. In an open field?
e. Near a body of water?
f. Flying over open country?
g. Other

24. IF you were MOVING IN AN AUTOMOBILE or other vehicle at the time
24.1 What direction were you moving? (Circle One)
a. North c. East e. South
b. Northeast d. Southeast f. Southwest
24.2 How fast were you moving? 30-35 miles per hour
24.3 Did you stop at any time while you were looking at the object?
(Circle One) Yes No
STOPPED AFTER SIGHTING INITIALLY

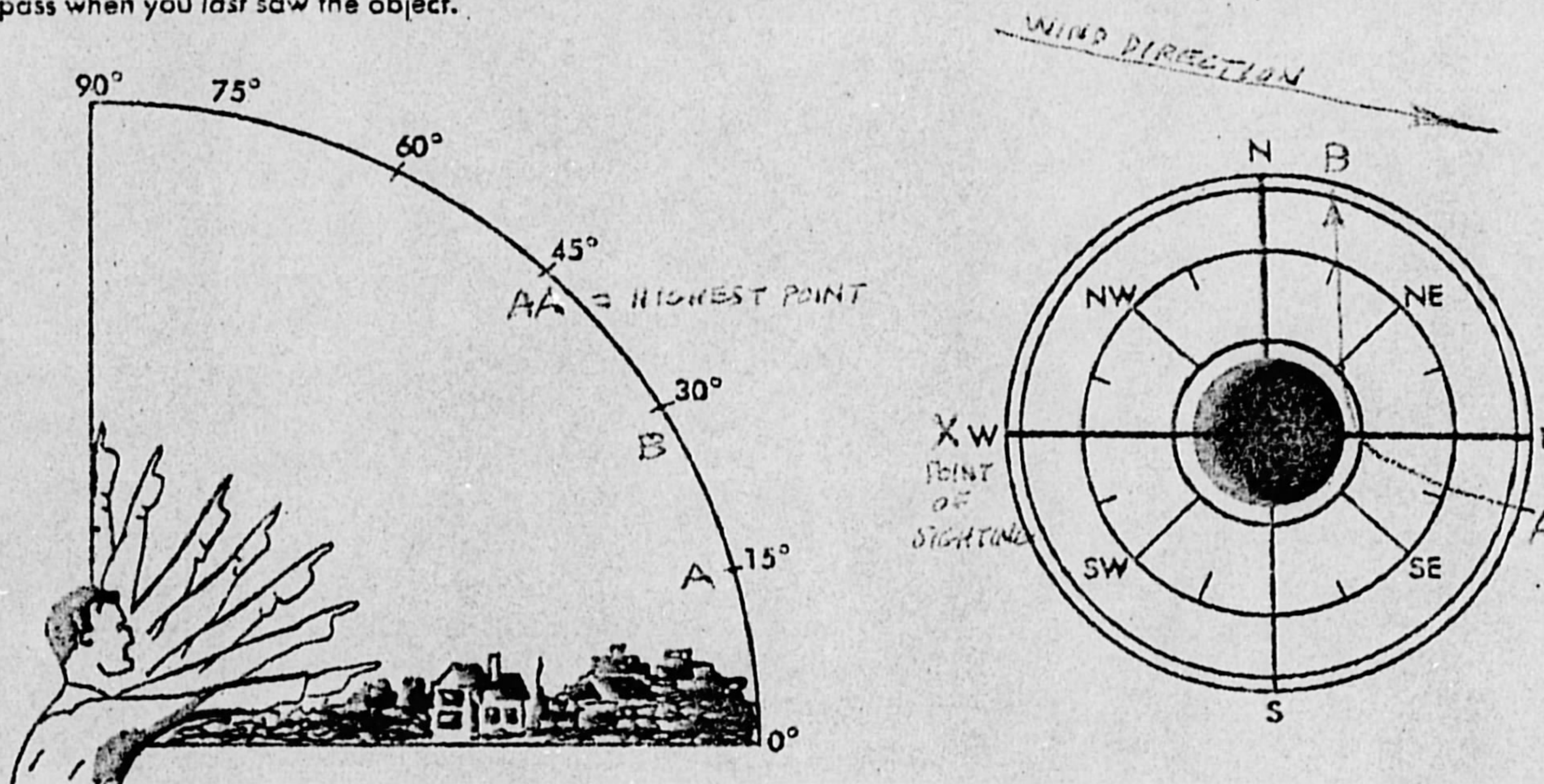
25. Did you observe the object through any of the following?
a. Eyeglasses Yes No e. Binoculars Yes No
b. Sun glasses Yes No f. Telescope Yes No
c. Windshield Yes No g. Theodolite Yes No
d. Window glass Yes No h. Other NO
INITIALLY, THEN THROUGH OPEN LEFT SIDE

26. In order that you can give as clear a picture as possible of what you saw, please describe the object which you saw.
NOTHING. THEY LOOKED LIKE NO COMMON OBJECT WE HAD EVER SEEN BEFORE UNDER ANY CONDITION. AS GENERAL SHAPE, WHICH I THREW IN HIGH SCHOOL, (AS CONCERNED). THE OBJECTS HAD DIMENSIONS AS IN FIG. II, PARAGRAPH 19.

Official U.S. Air Force UFO form cc

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27. 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. Place an "A" on the compass when you first saw it. Place a "B" on the compass when you last saw the object.



28. 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.



29. IF there was MORE THAN ONE object, then how many were there? TWO (2)
Draw a picture of how they were arranged, and put an arrow to show the direction that they were traveling. (SEE ABOVE)

WE SAW ONE AT A TIME. BOTH FOLLOWED ESSENTIALLY THE SAME PATH, ABOUT THIRTY (30) SECONDS APART.

30. Have you ever seen this, or a similar object?

NEITHER BE

31. Was anyone else with you at the time?

31.1 IF you answered YES, did you have anyone else with you?

31.2 Please list their names and addresses.

ROMA M. SPE
LYNDA L. SPE
MARLENE M. S

(SUN AGE 5 DIA

32. Please give the following information:

NAME [REDACTED] Last Name

ADDRESS [REDACTED] St

TELEPHONE NUMBER (303)

Indicate any additional information.

33. When and to whom did you report this?

Day

Air Force UFO form continued

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Page 6

Now how high the object
Now how high the object was
Place a "B" on the com-



ing of the path, a "B" at

000000A
NEW

traveling. (SEE PAGE)

BY THE

30. Have you ever seen this, or a similar object before. If so give date or dates and location.

NEITHER BEFORE OR SINCE.

31. Was anyone else with you at the time you saw the object? (Circle One) ☒ Yes ☐ No

31.1 IF you answered YES, did they see the object too? (Circle One) ☒ Yes ☐ No

31.2 Please list their names and addresses:

[REDACTED] (AGE 35 AT THAT TIME)
[REDACTED] (AGE 10 AT THAT TIME)
[REDACTED] (AGE 7 AT THAT TIME)
(SON AGE 5 DID NOT OBSERVE THE OBJECTS)

32. Please give the following information about yourself:

NAME [REDACTED] [REDACTED] [REDACTED]
Last Name First Name Middle Name
ADDRESS [REDACTED] ARVADA COLORADO 80002
Street City Zone State
TELEPHONE NUMBER [REDACTED] AGE 46 SEX MALE

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

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

[REDACTED] APRIL 1957 (TO THE DENVER POST)
Day Month Year
(AND TO NEIGHBORS WHO LAUGHED
OR JUST SMILED)

Official U.S. Air Force UFO form c

Page 7

34. Date you completed this questionnaire:

12 2 1967
Day Month Year

35. Information which you feel pertinent and which is not adequately covered in the specific points of the questionnaire or a narrative explanation of your sighting.

Heading east in my car with my family on a clear, cloudless, windy Sunday morning in April of 1957, I sighted an unfamiliar object, ahead and slightly to our right, coming toward us about 15° above the horizon. It approached on an apparently straight course, until it was about four blocks ahead of us and immediately east when it changed course at almost right-angle toward the north. Initially, the object was viewed through the windshield of the car. Startled by the sight, after a few seconds, I stopped the car. When the object changed course it was viewed through the open left side window, heading north. As I watched the object, I noticed a four-engined commercial aircraft, heading eastward about a mile and a half to two miles away, toward which, and above, the object headed. Above and beyond (to the north) the object disappeared. In the relative vicinity of the aircraft* the object appeared to be slightly smaller in size than the aircraft. From sighting to disappearance, the time involved was no more than 15 seconds.

As the object disappeared, none of my passengers were aware of what I had seen. My wife said, "What's wrong?" I looked toward where the object had

* DC-6, I think

NOTE: Possibly because of the wind, we heard ^{no} sound from the aircraft or the object.

disappeared
continued
Report
14 miles
I guess

We had -
I saw a
its path
shorted,

In setting
disappeared
the first
course.
essentially
shaped
of any an
bright
defined
the "color
My wife
In its
almost a
it turns
right an
was from
actually
slowly a

We do not
described
confidence
balloons,
another air
sightings

We will

Air Force UFO form continued

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a clear, cloudless,
 started
 to
 have
 recently
 our
 and
 at angles
 it was
 not.
 As I
 aged
 in left
 took
 commercial
 file and
 which,
 e and
 appeared.

Object
 was
 as, the
 under.

we were
 "What's
 had

around

Page 8

disappeared and saw nothing but the aircraft
 continuing eastward, apparently toward Stapleton
 Airport on the north east edge of Denver, about
 14 miles away. I shrugged and said "Nothing,
 I guess" and started the car moving eastward.
 We had barely gotten into motion when again
 I saw a similar object on the same course as
 its predecessor. I jammed on the brakes and
 shouted, "Look at that!" (No more - no less).

In retrospect, shortly afterwards, the second object
 disappeared in the same general direction as
 the first, after following the approximately same
 course. My wife and two daughters agreed
 essentially on what we had seen... a discus-
 shaped thing, moving about twice the speed
 of any aircraft we had seen, and it was
 bright, but not shiny and only vaguely
 defined (not sharp and hard-appearing).
 The "color" I described as of polished pewter.
 My wife described it as brushed silver.
 On its westward course it was moving
 almost directly into a stiff wind. When
 it turned north it moved almost at
 right angles to the wind direction. (The wind
 was from the W.N.W.). It did not seem to
 actually wobble but appeared to tilt
 slowly as it followed its course to "disappear."

We do not know what we did see, except as
 described above, but can say with reasonable
 confidence what we did not see... papers,
 balloons, birds, insects, temperature inversions, houses,
 another airplane, reflections (projected or otherwise),
 insufficient data, swamp gas or "other".

We will appreciate your comments.

Sincerely,


(CSI)

No Case (Information Only)

4 April 1957
West Freugh, Wigtownshire
Scotland

April 4, 1957. At an RAF station near West Freugh, Wigtownshire, in southwestern Scotland, three radar operators at two posts independently tracked an "unidentified object" which "flashed across their screens traveling at 60,000 feet. The operators said the object suddenly dived to a height of 14,000 feet, made two whirls, then vanished to the south. It was last reported seen heading toward the Isle of Man." (UP declared that "officials refused to say in which direction and at what speed it was traveling.") "We do not know what the object was," an Air Ministry spokesman said. "Intelligence experts are studying the report and a detailed statement may be made next week." (UP also stated that "a mystery object spotted on radar screens in Scotland may have been a Soviet reconnaissance plane.") Royal Air Force officials said no planes were in the area at the time. Unofficial sources described it as "too fast, too big, and too manoeuvrable for a plane." Full reports of the incident were turned in to the Air Ministry in London. It was stated officially that "their experts take a serious view" of such reports. No further details have been forthcoming. -- N.Y. Journal-American, Apr. 6 (INS); N.Y. Sunday News, Apr. 7 (UP Apr. 6); N.Y. Sunday Mirror, Apr. 7 (AP Apr. 6); Newark Sunday News, Apr. 7 (AP); London Sunday Dispatch, Apr. 7.

Frank Jet. "The Marge"
on flight tests. Some say the
"Wings are"

April, Early-Jersey Island, Eng-Several, elliptical-shaped, luminous, yellow
 UFOs seen maneuvering overhead, by several witnesses. 19
 Apr. 3-30 miles S. of Penrith, Scotland-11:30pm-Hovering, glowing, yellow UFO.
 Apr. 3-Chicago-Dr. Urey is reported as favoring firing Nuclear-warhead
 Missiles at the Moon, to break-loose a bit for Study! (What??)
 Apr. 5-Glasgow, Scotland-2, hovering, silver Discs vanished suddenly..
 Apr. 5-Vancouver, Canada-8pm-Two, rosy-glowing Saucers, apparently joined.
 (1 half off-center below the other) Silent & slow-moving..
 Apr. 6-Nutley, NJ-Night-Boys report "Fireball" falling into a yard! (CR:DOUBT)
 Apr. 7-Rothesay Bay, Scotland-3 fast Discs, silvery glow, high, in line..
 Apr. 10-E. Coast-2:05am-A large, round, bright, white LIGHT (seen from Nat. Air-
 lines Flight 720 nr. Norfolk, Vir.) It traveled SW at Airplane--
 Speed and went out abruptly. Clear Sky, says Report.. (See: May 19)
 Apr. 10-Kensington, Eng-4:50pm-Swaying; Double-Saucer seen. (Rare Type).
 Apr. 12-Milwaukee, Wisc-Night-2, bright, reddish-white UFOs traveling NE at
 high altitude. 1 circled back SE, rejoined other, both fading..
 Apr. 19-Pacific Ocean-11:52am-Japanese Crew report 2, disc-shaped, silvery
 (metallic-looking) Objects DIVE INTO OCEAN & vanish! Fast Objects
 caused violent turbulence in the Sea. No wreckage found by their
 ship ("Kitsukawa Maru"). (See: INFINITY # 50, "Secret Bases").
 Apr. 20-Nagoya, Japan-6:42pm-Three, glowing, red UFOs traveling E., surround-
 ed by a yellow ring, (Saturn-like?). (Thanx: Overseas Correspondent)
 7:10pm-2 UFOs reported. 1 was oscillating & showed a light flash-
 ing from yellow-orange to red. Left a blue-green trail. Other was
 blue-white. They made no sound, made a 90° turn & shot-up out of
 sight.. (+A Rumor of a Radar-Tracking)... ("Japan-Trench" nearby!).
 Apr. (about 20th.)-N. Peru-A large, brilliant, glowing, blue disk reported.
 (Many UFOs reported from Peruvian Jungles past few weeks!).
 Apr. 21-Suffolk, NY-8:15pm-23 blue-green Fireballs reported by 3 Flanders
 men. Aprx.: 1,000ft. Altitude, 200-300mph Speed. All going West.
 Apr. 21-Swansboro, NC-9pm-Orange Fireball traveling S. at high speed, at an
 Altitude of about 100ft.! It disappeared over the OCEAN!..
 Apr. 21-6 miles S. of Winchester, Vir-10:30pm-A bright, white UFO traveling
 NE to SW; Disappeared over Horizon; in straight path, in seconds..
 Apr. 21-Cambridge, S. Africa-10:30pm-Glowing, domed Disc, shooting color-lights.
 Apr. 21-Flanders, LI-Night-23 blue-green UFOs (reported by residents) travel-
 ed in groups at half-min. intervals. (AF says it's investigating
 the oval-shaped Objects). (Credit: Long-Island Daily Press).
 Apr. 22-Taegu, Korea-Night-3, egg-shaped, greenish-blue UFOs, +1 red-orange.
 All 4 left smoke-trails, silent, zig-zagging for 5 minutes..
 Apr. 23-Manchester, Eng-9:21pm-Starlike UFO went straight Southwest.
 Apr. 23-Denton, Eng-(Nr. Manchester)-Night-UFOs seen going Southwest. (Same?)
 Apr. 24-Tachikawa Airbase, Japan-9:03pm-Fiery, red UFO (like a burning plane)
 shot across the Eastern Sky, horizontally. 10x larger than Star.
 Apr. 26-Busby, Scotland-A circular, glowing, orange UFO plunges into field
 with loud report, mushroom cloud of blue smoke. Left a crater 18"
 across, 2' deep. Blast felt 2 miles away. Scientists puzzled!
 Apr. 26-Epsom Downs, Eng-8:45pm-Mystery Explosion leaves 5x3' crater!! (UFO?)
 Apr. 28-Christchurch, New Zealand-Day-Quantities of "Angel's Hair" falls!
 Brought into Telescope-Focus at 15,000ft. Altitude, in W. Airstream.
 Apr. 29-Hamilton, NJ-Night-Swinging, red LIGHT eludes Police. This small
 Light is said to have played tag with Police several nights..
 Apr. 30-Coverack, Eng-Silent, dome-shaped UFO over SEACOAST! After 10min.
 it shot away. (Witness questioned 2hrs. by RAF Intelligence)..
 Apr. 30-London, Eng-11:31pm-Glowing, red-orange Disc making circles South.
 Apr. 30-Dr. Pauling says Nuclear-Tests (to date) have given 10,000 Cancer!
 Apr. 30-Nuclear-Tests will cause 200,000 MIND-Body injuries per generatio

Apr. X-Denver, Colorado-Green Puppy born. Other 6 pups normal color! (?)

1957, Apr. 30-W. Pakistan-Halfpound Hailstones kill 32 People, injure 200!
 The sudden storm panicked villagers, killed 1,000 Animals!!

1957, Apr. 24-NY-Announcement of:US testing Rockets that travel at speeds
 in excess of 9,000mph! Exact speed is Top-Secret!!

1957, Apr. 22-Midd.; Conn.-7:52pm-Two, flashing, red LIGHTS, moving back &
 forth, cross each other's paths! Perfectly silent, I went NE &
 disappeared, while other went SW & dropped behind trees! A
 tinge of white light visible near red, seen thru Binoculars!
 Clear, Starlit sky; few clouds in NW; No wind; 41° temperature!

1957, Apr. 22-Florida-Three Unidentified Submarines off here! (Govt. says
 they're Russian)! +18 Tornadoes today, 9 in Texas!

1957, Apr. 17-San Francisco-Freak "Storm" topples Radio Tower, causes sleet,
 Lightning, 52mph winds! "Sun Spots" ahead of the Storm dis-
 rupted Radio & Wireless at 12:15pm! Storm gouged a big hole
 in the roof of 'Cutter Labs' (They released unsafe Salkcine)!

1957, Apr. 17-Florence, Italy-12 Earthshocks felt! (Salerno-Mt. Etna erupts!

1957, Apr. 16-Fort Carson, Colo.-Freak Lightning-bolt kills GI, flattens 7!

1957, Apr. 16-E. Indies-Tremendous Quake, 370 miles below the surface of the
 Earth, between Java & Borneo! Largest ever recorded in US!
 (+Nev. Atomic Safety-Tests begin! (to study mishandling)) (+
 largest, Russian, Nuclear Blast of their current series!)

1957, Apr. 12-SC-Navy Plane scattered over 5 miles, off S. Carolina coast!
 (+another Russian Nuclear-Test!) (+Military Planecrash in Me.!

1957, Apr. 12-16-El. Toro, Cal-2,000 bombs disappear from Marine Base!

1957, Apr. 10-Sea Quake aprx. 1000 miles out in Pacific! (+Russian Test!)

1957, Apr. 8-Denmark-Radar Stations have tracked an increasing number of
 "Rockets" (believed Soviet) in the past 12 months!!

1957, Apr. 7-Hawaiian Islands-A B47 crashes! (+minor Quake in Calif.!)!

1957, Apr. 6-Top Secret, Weather-Research Plane crashes! (+A tiny Tornado
 crosses N. corner of Lake Quassapaug, Conn. at 1am!) (+another
 Russian Nuclear-Test!) (It's raining Roentgens again!)

1957, Apr. 4-Scotland-UFO seen at 5 mile altitude by many observers & 3
 Radar Stations! It dived & whirled away! Chased by RAF Pilots
 Still hunted 2 days later! No planes in the air at time of
 sighting! England excited! Even NBC mentioned it! (+Savage
 Tornadoes lash several S. & Central States!)

1957, Apr. 3-Near Sheriden, Ark-Late Night-UFO, possibly a plane, seen to
 crash in deserted swamp & burn! Search Underway!! (+Russian
 Nuclear Device exploded!) (+Tornadoes in Texas!)

1957, Apr. 2-A "Mysterious Blast-From-Space" felt in NY state, NJ & part of I.

1957, Apr. 2-Four miles S. of Texarkana, Ark-8 1/2 inch Hailstone fell during
 a 15min. Hailstorm here! (Found by Mr. Leo Oceanbeam)

No Case (Information Only)

6 April, 1957
British Radar Sighting

Source: Satellite 1 June 1957 (Richard Hall)

BRITISH ISLES REVISITED

(More information on the British radar sighting of Apr. 6)

London Evening News - April 6:

"It was never seen by the naked eye, but its position and speed were logged, checked, and double-checked. Wing Commander Walter Whitworth, C.O. at the RAF bomber trials range... (said), 'I have been ordered by the Air Ministry to say nothing about the object. I am not allowed to reveal its position, course and speed. From the moment of picking it up it was well within our area. It was a solid, metallic substance -- quite definitely not a freak...' The (radar) sets in separate buildings -- were left on for an exercise. A few minutes later a signal appeared on both screens. Each set has a duplicate. They, too, were switched on; they too, recorded the object."

London News Chronicle - April 6:

"Don't talk orders have been issued to the two radar operators, James Hovey and John Kolosky, both of Stranraer, who picked up the object on their screens."

No Case (Information Only)

April 8, 1957
Tampico, Mexico

Source: Satellite 1 Jun 57 (Richard Hall)

... ON THE GULF OF MEXICO
Tampico, Tamps. Apr. 8, 1957
(From the Excelsior, Apr. 9)

"During 15 minutes many of the inhabitants of this port observed last night, in space, a round and luminous object, with all the characteristics of the 'flying saucers'. Within minutes after it made its appearance, the streets and roofs of the buildings were filled with on-lookers who followed the path of the mysterious object. The object appeared like a ball of fire. It went in and out of clouds. It became big and small, alternately, and ~~went down to the ground and then up to the sky~~. (Some people) said that the object threw out flames from one of its sides, turning blue and then red meanwhile, until it disappeared in space (in the sky). The newspapers received reports from all over Tampico regarding the mysterious object."

UFO SIGHTED FROM NATIONAL AIRLINES PLANE NEAR NORFOLK

On the morning of April 10, 1957, a round silvery object was sighted from National Airlines Flight 720 by Herbert L. Nichols, Jr., construction engineer, author, and publisher. This report, which NICAP is checking, was sent in for evaluation by a NICAP member, the head of a large corporation.

Mr. Nichols is a graduate of Columbia University and from 1934 to 1941 he operated an excavation and grading business in Connecticut. In World War II he was first a civilian employee of the U.S. Army in South America and the West Indies and later a member of the Seabees in the Aleutian Islands.

Since the war he has not only operated his construction business but also has written and published several books. With his wife, Dr. Hazel J. Berglund, he wrote and published *It's Not All in Your Mind*. Since then he has published several books on excavation, including *How to Operate Excavation Equipment and Moving the Earth*.

Mr. Nichols' firsthand report follows:

"On Wednesday morning, April 10, I was in the rear west window seat of the El Pacifico plane, National Airlines Flight 720 northbound. At about 2:05 a.m. I saw a light below us, moving oppositely to our course, but slightly more toward the west. It followed the line of a highway, but when it went over a small town I could see that it was above it. The light was round, large, and bright without being dazzling.

"Just after passing over the town it went out abruptly. A moment later a dull silvery object was very faintly visible by direct reflection from the moon. Its brightness was then similar to that of the reflection of the moon in rippled water, not as bright as on still water. This reflection was faint and brief enough so that it might have been an optical illusion.

"The speed of the object was comparable to that of a southbound

plane that passed to the west slightly below us a few minutes later, and that was marked by flashing red and white lights. The air was perfectly clear, with a few very high clouds. Plane height had been stated to be 18,000 or 19,000 feet. A few minutes later we passed over a city which I believe to be Norfolk, Virginia.

"The light was definitely in the air, and it was too large to be an airplane light, and was perfectly steady in intensity. Its color was a clear white like an automobile headlight. It was in sight for at least five seconds, and perhaps three times as long.

"The light was probably smaller than a dime at arm's length, but was large enough to appear definitely circular in outline. The unlighted machine was at least as large, or possibly larger, and gave an impression of roundness also. But it was then very indistinct, and protrusions would not have been visible."

* * * * *

If any NICAP members in the area approximately 10 to 60 miles south of Norfolk sighted any object at this time or heard of such a sighting, please communicate with NICAP. Reporting forms will be sent on request. NICAP is also communicating with the Civil Air Administration and with the crew of National Airlines Flight 720 to see whether the object was sighted by the pilots and from any CAA towers along the route

NO CASE (INFORMATION ONLY)

21 Apr 57
Sault Ste. Marie, Ont

SOURCE: Flying Saucer - Oct 59

I saw a saucer on April 21, 1957; next day I sent the report to the Air Force in Washington and got no reply. I would have sent the sighting to you in your first issue but I did not know there was such a magazine at the time. The time was about 12:15 P.M. (EST), the sky was clear so I decided it would be a good night to look through my telescope. As I was about to lift my telescope to look, a saucer appeared right over me in the eastern sky. The object was pretty close to me as I could make it out very well. The saucer was lighted yellow, it had a circular disc with a dome on top. On the dome I could see a round window. I saw no one inside. I sighted it for about a half minute when it disappeared behind our house (I was standing at the side of it). As I could see it, it was the size of a kite. The object was heading southwest at a very fast speed. It did not make any sound.

Norman R. Ouellette
Dwarsault Observatory Club
441 Sherbourne Street,
Sault Ste. Marie, Ont.

(CSI)

No Case (Information Only)

21 April 1957
Flanders, L.I., N.Y.

April 21, 1957. On Easter night 23 blue-green oval objects were seen by a number of residents of Flanders, Long Island (at the eastern end of Suffolk County.) They glided silently over at half-minute intervals (for similarities, see the Nov. 16 report from New Rochelle) and one witness, Michael Pace of 869 Flanders Road, estimated their altitude at 1000 feet and their speed at 200 to 300 mph. Lt.Col. Frederick Pleoty, executive officer at the Suffolk County Air Force Base, said the Air Force is investigating. "I have no idea what these objects could be," he said. "We had nothing but routine patrols in the air." --Long Island Daily Press, April 22, 1957.

Case #2 - Palada (Pyr.Orient.) April 22,1957.

Investigators: Jimmy Guieu -Chief of Investigational Bureau of C.I.E. Ouranos.

Dr. Marcel Pages another investigator of C.I.E. Ouranos for the
Oriental-Pyrenees Region and the medical representative and engineer;
Jacques Verpillot an investigator from Marseille that is also with
the C.I.E. Ouranos.

Data: Mr. Paul Jaubert, a retired judge wrote the C.I.E. Ouranos in Palada.

Eye witnesses: Mr.&Mrs. [REDACTED] that live in Palada in the village of Amelie-
les-Bains.(P.O).

22 April 1957
Palalda, France

20.

Palalda - April 22, 1957

Since this case has not been described previously in the News Letter, we give below a practically complete translation of Gugu's article in Ouranos about his personal investigation.

On Monday, April 22, at 1 p.m., M. and Mme. [redacted], farmers of Palalda, were in their cabin beside their cherry orchard. Mme. [redacted] was washing the luncheon dishes when she became aware of an unusual roaring noise outside. She stepped outdoors to see what caused the noise, and saw an enormous vortex of blue and red flame approaching from the north. At an altitude of only ten or fifteen yards above the ground, it was descending toward their vineyard. It had the appearance of a cone of flames, spinning very rapidly but moving forward slowly. Frightened, Mme. [redacted] called her husband. They watched the flying object together, as it hovered for about a minute at a point 15 feet from the western edge of the field and 15 feet above the ground. The vine shoots near it were violently agitated, and the soil was set spinning in a cloud of dust that seemed to be sucked up toward the object. Throughout, a deafening uproar was emitted. The vortex then resumed its flight southward above the field, but stopped again after traveling 400 yards and hovered 15 to 30 feet above some cherry trees in a hollow, near a bridge. The branches and foliage of these trees were violently whipped about and "bent back and forth in every direction," until it seemed that the limbs would be torn off. The cone then resumed its slow course and "climbed" a hill - keeping about 30 yards above the ground; but at the top of the hill it rose abruptly into the sky and shot away at prodigious speed toward the southwest.

No solid "machine" was discerned by the witnesses - nothing but a conical vortex of red and blue "flame," the point downward, whose diameter at the top was about 15 feet. The size and shape could not be stated precisely, because some of the "flames" emerged in all directions from the whirl, but in general it was conical.

Where the UFO had hovered in the vineyard, the ground was violently swept about and disordered. The vines were not in the least scorched, although the cone had been only 15 feet above them; so probably the "flames" were not ordinary flames but some form of ionization phenomenon.

About five yards west of this stopping-point runs a metal fence in a very bad state of preservation, consisting of an irregular wire mesh strung on rusty iron uprights of T-shaped cross-section, interspersed with wooden posts. The only fencepost showing magnetism was the iron one closest to the stopping-point, which deflected a compass needle by 30°; the effect was noticeable even a foot away from the post. The other iron fenceposts - the nearest of which is five yards from the magnetized post - caused no compass deviation at all. This tends to show that something unusual had affected the one first examined. Neither was there any residual magnetism detectable in the ground. These tests were made in the presence of Messrs. Jacques Verpillot, Ouranos investigator from Marseille, and Paul Jaubert, retired magistrate and Ouranos correspondent for Palalda.

In company with Dr. Marcel Pagès, Ouranos investigator for Pyrenees-Orientales, M. Verpillot and I visited the police station at Amelie-les-Bains and informed them of this sighting, playing the taped interview with the witnesses for them. The gendarmes told us that the Basous enjoy an excellent reputation in the community, but expressed surprise that the incident had not been reported to them in the first place. We explained that this was because the witnesses had feared ridicule; this fear had been disarmed by the scientific character of our investigation. We assured the police that, on our request, the [redacted] were willing to give them a complete report. On May 11 the police went to the farm to make inquiries.

On Monday April 22, 1957 at 1:00 P.M. Mr. & Mrs. [REDACTED] could be found in a little wooden cabin on the far side of their wine vineyards after lunch. Mrs. [REDACTED] was washing the dishes when all of a sudden she heard a terrible racket and noise all around the little cabin. She ran outside and when she glanced up she observed an enormous whirlwind of blue and red flames that at approximately 10 -15 meters of altitude began to descend on the vineyards.

Frightened Mrs. [REDACTED] asked her husband to come and join her and see what she was frightened about. The "thing" had the aspect of a cone of flames that were whirling around the "thing" itself at a slightly turning speed but the "thing" did not displace even slightly from its bearing.

The flying object stopped for approximately 1 minute at 5 meters from the western part of the field. It maintained itself at an altitude of approximately 5 meters from the ground. In the course of the first stop the vine stocks were strongly agitated and so was the ground as they underwent a sort of aspiration that was directed in an upward direction (therefore towards the apparatus) and the apparatus was meanwhile violently whirling. The object whose giration on the spot was accompanied with a deafening sound, recovered the flight above the field and then descended towards the south at approximately 400 meters from the first stop at 5 to 10 meters from a clump of trees (cherry trees) in a gap in the ground near a bridge.

The gyrating cone created a violent turbulence (?) that brutally and roughly made the leaves and the branches of the trees shake. The latter, according to the witnesses, were bent in several manners. Their branches and leaves seem to be on the point of being yanked out. The cone of red and blue flames once more started on its slow course and trajectory and then climbed the direct side of a hill (at approximately 30 meters from the ground) then having reached the top of the hill it rapidly ascended into the sky at a very rapid rate of speed and disappeared. The latter disappeared in a North-Easterly direction.

At no time did the witnesses see the so called "apparatus" itself all they claim to have seen was the turbulent mass of whirling flames that were red and blue and were in the form of a cone and the point of which was directed towards the ground and the peak of the latter was approximately 5 meters long.

The witnesses could not be exact in relation to the form of the apparatus as the latter was completely covered with flames that were oscillating in all directions and whirling but they did think that the ensemble on the whole seemed to have a cone-shaped aspect.

At the time that D.V.N.I.(U.F.O.) went to the vineyards the ground was violently swept and turbulent. Even though the apparatus was only 5 meters from the ground we found no trace of burned spots on the ground or any calcination. Therefore one is not really dealing with "flames" but with some phenomenon of ionization.

At approximately 5 meters from the immobilization point we found a metallic fence ,in very bad condition, of latticed irregular links and metallic wire lattice work posts. The other part of the fence had wooden posts. Only the wire post (approximately 1 meter high) that was situated at approximately 5 meters from the immobilization point presented a magnetism. This magnetism made the needle of the compass undergo a 30 degree deviation. The 30 degree deviation of the T-shaped wire post became sensitive and increased in a gradual manner in proportion to the proximity of the compass.

Thus, the other wire posts (that were situated at approximately 5 meters from the magnetized T-shaped wire fence post) did not present any magnetism. Thus the latter did not barely make the needle vary at all. This remained constant even when the compass was placed within 4 centimeters of the latter. This negative test result tends to prove, on the one hand, that the mass of these bars (all of the same nature) is not sufficient to provoke a sensitive deviation of the needle with the only exception being that that was already registered and is in absolutely no way an inherent quality of this metal.

There was no trace of magnetism on the ground near the immobilization points and the around the place where the object was supposedly present.

These tests and these reports have been executed in the presence of Mr. Jacques Verpillot and Paul Jaubert that are related to the C.I.E. Ouranos in Palada.

We were rejoined in Amelie-les-Bains by Dr. Marcel Pages, who is the investigator of the C.I.E. in the Pyrenees-Orientales province, Mr. M.J. Verpillot and myself went to the police station of Amelie-les Vains where we were received by the warrant officer Mahoux and the policemen Poudade and Barbe. We have received the observations that had been made by the latter in Palada and on the testimonies that were supplied by the eye witnesses and also placed on tape.

These observers were surprised at the lack of respect that the witnesses gave them. We explained to them that this silence on the part of the witnesses was more than likely due to the fact that they did not want to appear ridiculous. Anyway, in relation to the scientific character of our investigation the witnesses did agree to make a statement at the police station and this was in fact executed on the 11th of May.

This event offers more than an analogical comparison with that that occurred in Vins-sur-Caramy (Var) on April 14, 1957. At Vins the apparatus that was seen was metallic and cone-shaped and the only thing that is lacked was the "Flames". The one observed in Palada was considered a "flaming" cone that was apparently the reason the shape of the apparatus was not immediately discernible. In fact, the "flying saucers" are frequently hidden in a flamboyant halo and falling lumination and both of these are more than likely due to some ionization phenomenon.

Second analogy: In the two observations the ground was swept and roughed up and scattered by the apparatus. If at Vins-sur-Caramy the magnetism that was registered was 15 degrees deviation of the needle of the compass and at Palada the deviation was 30 degrees. And one must keep in mind the fact that the T-shaped wire fence laticing is rather inferior to that of the signal poles from Vins.

Meanwhile the apparatus that was observed at Vins was silent. The noise that was produced and heard was supposedly due to the violent vibrations of the signal poles that were apparently subjected to the intensity of the natural magnetic field of the apparatus. In Palalda it was the apparatus itself that produced the noise that attracted the attention of the witnesses. The latter had an excellent reputation in the village and this reputation was confirmed by the police station and the warrant officer.

Let us make note of the fact that in Palalda the fence -made of slim wire posts and some wood and some latticed grill work - was not able to produce the noise that was reported by the witnesses even though it was also subjected to the same type of vibrations.

We are therefore dealing with two types of apparatus that are similar in form and size and in their managability but different in "mechanical" manifestation as although they apparently are similar they are both silenced by means of some sort of a special device that utilizes the magnetic field.

Conclusions:

No Nation on the earth has aircraft that are silent in maneuvers and silenced by a propellor system and therefore it is ipso facto that these apparatus come from another world. On the other hand the new type of apparatus that have begun to be manifested in a singular manner let one suppose that other apparatus of this type will soon appear. It will therefore be indispensable that the witnesses that should observe these "phenomenons" not hesitate in informing and placing themselves in touch with police stations or our Investigational Bureau, or the press.

Jimmy Guieu.

Note:

A new magnetic examination was conducted by Dr. Pages one month after the investigation and the examination by Jimmy Guieu. This indeed exposed the fact that metallic posts had an inversed rate of magnetism. The almost exact same as in Vins one can ask

whether or not the proximity of the apparatus can possibly cause the apparatus that are near to be temporarily neutralized in relation to their normal state and yet cause others to be modified or increased ? Periodical measurements will be conducted on these pieces of fence in order to establish their eventual magnetism.

Smoke Trailing Disc Reported Over New Zealand

Similar to 1952 Peru Case

A unique daytime sighting report of a smoke-trailing disc, estimated at several hundred feet in diameter, has just been released to NICAP by a New Zealand fishing-boat captain and boat builder.

Withheld from publication until now, this report by Ronald L. Matheson of Mount Maunganui, New Zealand, is backed by his employer, Samuel E. Rix, Director of the Tauranga Big Game Fishing Club. Rix fully vouches for Matheson's qualifications and integrity and also states that he accepts the report as genuine and accurate.

Mr. Matheson's report follows:

I am a licensed skipper of the Tauranga Big Game Fishing Club, and am also a builder. I have lived at Mount Maunganui for slightly over twenty years, but have never before seen anything even remotely similar to the object described in this account.

on an irregular, constantly changing course throughout the sky.

As I watched, the object approached me at a slight angle bearing to the left. It then tilted at a steep angle and, shooting upwards, showed its circular shape clearly. It appeared as big as a florin held at arm's length. The rapid maneuvers it made covered an arc of about 15 degrees. For a period of at least twenty minutes I watched these movements, while I steered the *Rosa* out towards the Hauraki Gulf.

Not knowing the actual size of the object makes it hard for me to say how far away it was. I believe though that it was some miles away. The object was very clearly defined. Smoke poured out from its curving sides, narrowed immediately behind, then broadened out into a widening but thinning wake astern. The smoke was a dark greyish color and the trails remained in the sky for at least ten minutes before vanishing.

movements in the sky—plunging, ascending swiftly and turning through every imaginable angle—I was able to get an unmistakable impression of its shape.

It was a huge disc. Its rapid movements suggested tremendous power. Moving in horizontal flight, it appeared to cover a distance of miles in as many seconds. I consider that it was a very large object and may have been several hundred feet in diameter. I make this statement having seen Pan American airliners at what I believe to be approximately the same distance.

Just before flying off, it leveled out and then moved away very rapidly in horizontal flight, passing over the mainland in the direction of Warkworth and Cape Rodney in the upper Hauraki Gulf. The tangle of smoke trails remained for some time, then slowly faded out of the evening sky.

During all these rapid maneuvers I heard no sound. However, the noise my boat engine was making may have muffled any other sound.

The description given is as accurate as I can make it. I feel that what I saw is important enough to justify study and hope that this report—fantastic as it may appear—will be given serious consideration.

Statement by Samuel E. Rix, Director,
Tauranga Big Game Fishing Club

"I have known Mr. Ronald Matheson since 1946 and can testify that he is a most reliable person. He has previously been very skeptical about reports of unusual flying objects. Now, however, he is most assured about what he has seen and feels that it is not a matter for argument.

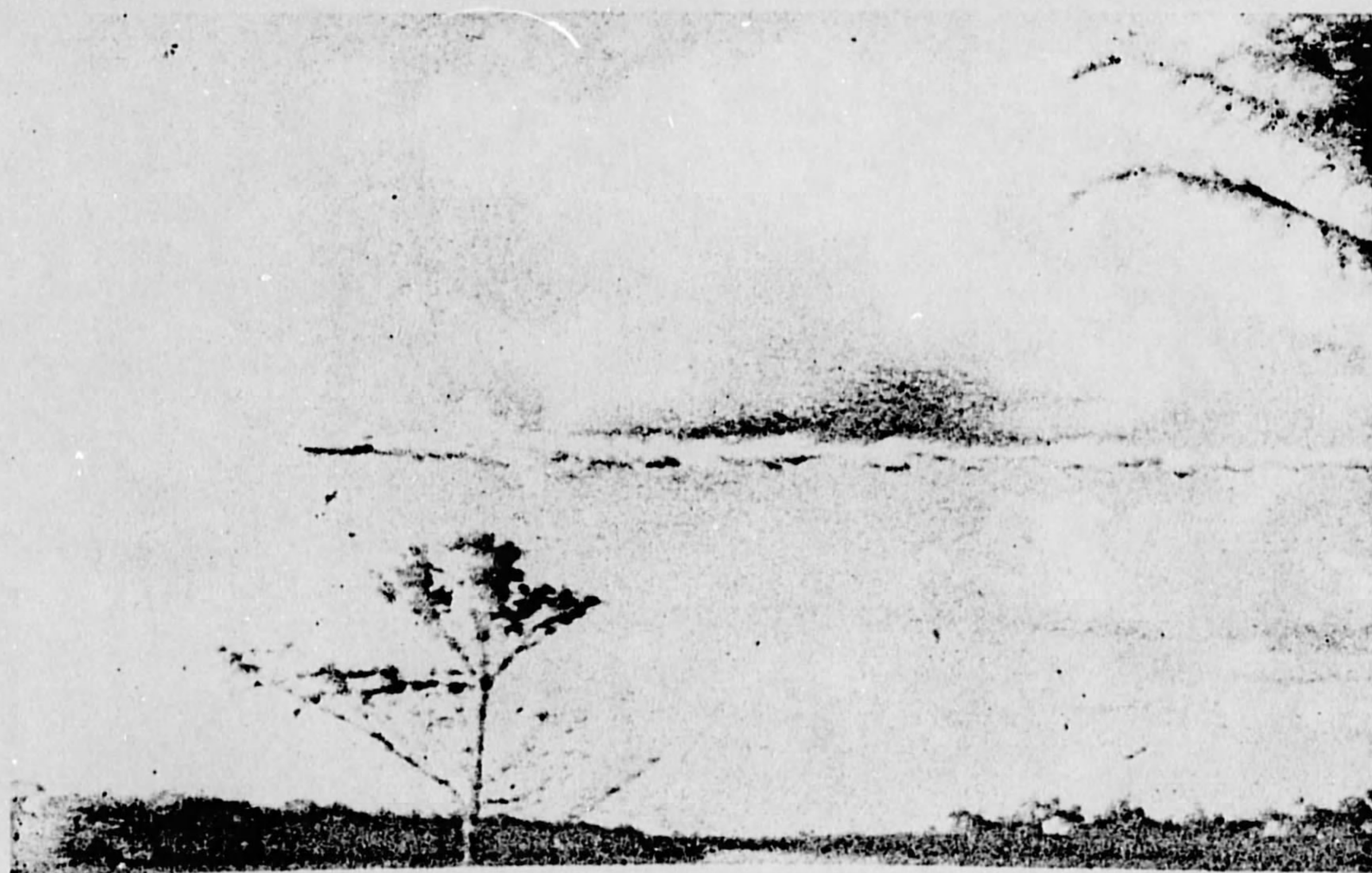
"Knowing his practical attitude and steadiness, I am prepared to accept the accuracy of his report. It is his belief that the unidentified object described was of terrestrial origin and that its existence is being kept secret for security reasons. In my opinion, this is doubtful."

NICAP Comment

This report is unique because of the combination of unusual smoke trails and violent maneuvers. The disc's description as dark or greyish is not unusual with daytime reports of objects not in position to reflect sunlight. It seems clear, however, that the object was not a light source, or self-luminous, as many UFO's are described.

The presence of smoke trails and simultaneous violent maneuvers possibly could be evidence that the UFO was having mechanical trouble, especially since it

(Continued on Page 13)



This photo, reportedly showing a smoke-trailing UFO over Peru, was taken by a custom's administrator. (Credit: James Moseley. See story for details.)

On April 27, 1957, at 4:30 pm, I was navigating the *Rosa*, a fishing boat, off Port Charles on the Coromandel coast. I was approaching Channel Island when I noticed an irregular smoke trail which seemed to rise from behind the island. As I came abreast of Channel Island I saw an oval, disc-shaped object from which the smoke or fumes were streaming. The object was travelling horizontally. Two saucers fitted together face to face would be roughly similar to its appearance. Smoke streamed away from its sides as it moved

The object appeared greyish but had it been made of polished aluminum, say, it would not have reflected light, the sun being beneath and to the left of it.

It gave me the unmistakable impression that it was some form of controlled flying machine, but its flight was so rapid that by comparison a jet plane would appear ridiculously slow. I want to make that clear. The thing was being flown, or directed. Somebody was flying it.

I must also stress that I saw this object in clear daylight and as it made so many

NEW ZEALAND / from Page 12

finally leveled out and departed in horizontal flight. Mr. Matheson's report does not indicate whether the smoke trails continued during this final phase. (He has been queried on this point.)

At NICAP's request, the Matheson case was personally investigated by Harold H. Fulton, President of Civilian Saucer Investigations, New Zealand, who is also a member of the Committee. Mr. Fulton established that the ROSA was in the area reported, the boat having been seen before and after the sighting period by the naval patrol boat MAXO. Through other sources he also confirmed Mr. Matheson's reputation for accuracy and reliability.

The CSI (NZ) president said in his opinion the report was genuine.

Fulton also sent NICAP another New Zealand report, now under investigation, in which witnesses at three widely separated points reported sighting a silvery cigar-shaped object on August 2, 1957. One group of witnesses included three school teachers and 100 pupils at Reefton. The rocket-shaped object, which left a distinct vapor trail, was described as flying through various intricate maneuvers, including a square pattern. Although the UFO once descended to a low altitude estimated at 3,000 feet, witnesses heard no sound.

Aside from the smoke-trail factor, the disc's swift changes of course bear a close resemblance to the UFO maneuvers reported by Captain W. J. Hull, Capital Airlines, elsewhere in this issue.

(See "UFO Encounter Convinces Airliner Captain, Former Skeptic")

NICAP will appreciate hearing from anyone with authentic reports similar to the New Zealand smoke-trail case.

Because of the New Zealand report NICAP believes members may be interested in the accompanying picture supposed to have been made of a smoke-trailing object over Peru in 1952. The photograph and extracts from the sighting report are reproduced with the kind permission of James Moseley, editor of SAUCER NEWS.

In a letter dated August 10, 1957, Mr. Moseley gave NICAP the following account of the incident:

"In Lima I met Senor Pedro Bardi, who is an agricultural engineer. On July 19, 1952, while on a farm in the Madre de Dios section of Peru, he and others saw a saucer. It was about 4:30 p.m. and they were talking to Lima by radio.

"Suddenly, according to Bardi, the radio went dead. They looked out the window and saw a round object going by at high speed. (The witnesses included Pedro Arellano, owner of the farm.) The object had passed, it was at an estimated 100

meters altitude and was a little smaller than a DC-3, according to Bardi. It made a buzzing sound as it went by."

The object's speed, Moseley explains, was determined by a report that it was seen four minutes later near Porto Maldonado, 120 kilometers distant. This speed was computed at 1117 miles per hour.

The photograph was secured from a customs administrator named Domingo Troncosco, who said he had taken it as the object flew near the port. Though the photo shows a cigar-shaped object instead of the round shape Bardi described, this could possibly have been due to an elongated effect caused by speed.

"It seems obvious to me," Moseley told NICAP, "that the photo is genuine. Incidentally, I (strongly doubt) if this particular saucer was anything but earth-made."

Though NICAP has no reason to doubt the picture's authenticity, we are unable to make an accurate analysis without the negative.

"Three Men in Black"

Several members have asked NICAP about charges by various UFO investigators that they have been silenced by three mysterious "men in black suits." To these queries, Mrs. Ragna Solling, a Fresno, California member, asks whether there has been any attempt to silence NICAP.

While there have been several discouragements, mainly from official refusals of official UFO information for our analysis, we know of no threatening attempts to muzzle NICAP or end our investigation.

Specifically, we have not been contacted for this purpose by anyone, including Government agent or agents, any member of Congress, the representative of any special group, or by any "men in black."

As soon as possible, the UFO INVESTIGATOR will cover the reported "silencing" cases in detail; however, the answer may not be conclusive since at least one investigator involved has refused to reply to questions about the reported incident.

Meantime, we wish to emphasize that no one—in or out of the Government—has any legal authority to request or compel withholding of UFO information, unless it can be specifically proven to involve military security or to endanger the safety of the United States.

Witnesses to UFO sightings have reported that they were asked or told not to talk about the cases. Some witnesses, as a result, have refused to discuss their sightings. But under the policy stated by the Air Force, there is no authority for such an order with the exception previously mentioned.

Collision Ruled Out in Case of Man Blown From Airliner

The disappearance of S. F. Binstock, retired Hollywood jeweler, through a hole torn in the side of a Western Airlines plane, has been listed as due to internal causes. NICAP has just been informed.

Though the official Civil Aeronautics Board findings have not been made public, at press time, it has been decided that no external object was involved, but that an explosion occurred in the airliner. Early reports had caused speculation that a collision with some unknown object had torn the gaping hole in the plane through which Binstock's body disappeared.

These rumors were typified by the following letter in the Los Angeles Examiner on August 6:

"As regards the hole in the side of the Western Airlines plane, who is kidding who? A little study of the forces involved shows clearly that it was caused by collision with an extremely fast object striking the plane from a nearly vertical angle.

"Even if the plane was pressurized at 10,000 feet, there would be no damage such as this.... Remember the two near-collisions last month by airliners with objects, in which passengers were injured?

"It is about time the Air Force lets us know just what is going on in our skies."

It is true that Western Airlines Captain Milton Shirk at first believed there had been a collision.

"I thought somebody ran into me," he told the press. When no other aircraft was found to be involved, this statement probably helped to set off rumors that a UFO had hit the plane.

Binstock, who boarded the plane at Las Vegas, Nevada, had two roundtrip insurance policies totalling \$125,000. He was last seen aboard the airliner when he entered the washroom. The accident—which passengers described as sounding like an explosion, occurred over the Mojave Desert where Binstock's body later was found.

From the evidence amassed by the Civil Aeronautics Board and the FBI, there appears to be no justification for believing that a UFO was in any way involved in this strange case.

SHOW NICAP MAGAZINE TO YOUR LOCAL NEWSPAPER EDITOR

Copies of this magazine will be sent to all the press-wire services along with a press release stressing important items. If your local papers do not mention these main news items, please send or show this copy to at least one newspaper editor.

Information Only

Source: CSI Bulletin # 20, 25 July 57

29 April 1957

White Plains, N. Y.

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April 29, 1957: At 9:55 p.m. CSI member Bill [redacted] and his wife were watching Arend-Roland from the roof of their apartment house in White Plains, New York, when they saw a flight of lights sweep across the sky, which was very clear. From the southwest, four objects about 30 degrees above the horizon, in 'V' formation, streaked across the sky and disappeared into the northeastern part of the night sky. The objects were very light luminous blue, and their apparent size was about that of a pinhead at arm's length. Their apparent elevation remained about the same (30 degrees); however, there was a slight downward slant (about 5 degrees) from the horizontal plane, toward the northeast. They were in view for approximately two and a half seconds; they did not appear to change their shape, color, or brightness. "I've watched the sky through the telescope and with the naked eye for some time and I can say I have never seen anything as odd or as strange as these four objects. In fact it gives one a kind of feeling one does not soon forget." Mr. [redacted] drew the flight path of the objects on a star map; it passes between Polaris and the Comet Arend-Roland.

Information Only

Source: CSI Bulletin # 20, 25 July 57

29 April, 1957

Hicksville, L. I., N.Y.

COMET AREND-ROLAND AND INTERLOPERS

April 29, 1957: The following report is sent to us by CSI member Herman Mitchell:

"Mr. and Mrs. ~~W. J. Allen~~ saw something from their backyard in Hicksville, L.I. on Monday, 29 April 1957, from 7:55 to 8:05 p.m. while looking for the comet. They looked 'right after sunset' as the papers had urged them to do, most erroneously, and saw in the northwest sky: "...the comet. It had a red body and a red tail and was moving so fast that by the time we called a neighbor it was only a faint grey streak in the sky." Since I knew from personal observation that Arend-Roland was only visible in complete darkness (two hours after sunset, and their observation was made in daylight) and most certainly was not red or moving about, I went over and nailed the details down. The ten-minute period of observation is an estimated one. The object caught their eyes in the northwest sky about 15 degrees above the horizon (or houses) and was moving steadily towards the west and losing elevation. Red, elongated body; red, slightly fan-like tail about as long as the body, "most definitely not an airplane." It flew behind a TV aerial some 400 feet away "which was of the same dimension." A dime at arm's length approximated the aerial's expanse. The object became fainter, turned into a grey streak almost due west and was lost to sight entirely slightly south of west. Mrs. van Allen is my sister."

No Case (Information Only)

29 April 1957
Virginia, Minnesota

Source: UFO Investigator July-August 1960

APR 29 VIRGINIA, MINN.
Robert L. Lamm and Alex E. Lamm saw
about 38 UFOs which passed overhead
in groups of 5 and 3 during a forty-
minute period beginning at 10:15 p.m.
The UFOs, giving off a greenish light,
travelled from east to west at a
steady speed, taking about 3 seconds
to go from horizon to horizon.
Through 15X50 binoculars, the objects
appeared to be flattened or disc-like,
and they moved in crescent formation.

MAY 1957 SIGHTINGS

DATE	LOCATION	OBSERVER	EVALUATION
1	Washington, D. C.	[REDACTED]	Astro (METEOR)
2	Edwards AFB, California (IN SEPARATE FOLLOWING FOLDER)	[REDACTED]	Balloon (PHOTO)
2	Lake Silkworth, Pennsylvania	[REDACTED]	Balloon
2	Cincinnati, Ohio	[REDACTED]	Aircraft
2	Denver, Colorado	[REDACTED]	Astro (METEOR)
3	Goodland, Kansas-Stead AFB, Nevada	[REDACTED]	Astro (METEOR)
4	McClellan AFB, California	[REDACTED]	Other (ROCKETS)
5	Santa Rosa Island, California	Military	Aircraft
7	Canton, Ohio	[REDACTED]	Aircraft
7	Jackson, Mississippi	[REDACTED]	Insufficient Data
7	Fargo, North Dakota	[REDACTED]	Aircraft
7-8	Macon, Georgia (IN SEPARATE FOLLOWING FOLDER)	[REDACTED] (PHOTOS) (IN SEPARATE FOLLOWING FOLDER)	1. Aircraft 2. Other (PARACHUTE)
12	Bel Air, Maryland	[REDACTED]	Astro (STARS/PLANETS)
13	San Angelo, Texas	[REDACTED]	Aircraft
14	Tallmadge, Ohio (CASE MISSING)	Civilian	Aircraft
14	Springfield, Missouri	Multi	Astro (METEOR)
20	Laredo, Texas	Military	Insufficient Data
21	Ventura, California	[REDACTED]	Insufficient Data
21	Berlin, Germany	Military	Balloon
23	Kansas City, Kansas	Multi	Aircraft
24	Sturgeon Bay, Wisconsin	[REDACTED]	Aircraft
24	Kings Park, Long Island, New York	[REDACTED]	Other (INCON. INFO)
24	Chestertown, Maryland	Multi	Other (FLARES)
25	Elkhorn, Wisconsin	[REDACTED]	Other (FLARE)
26	Loring AFB, Maine	[REDACTED]	Insufficient Data
26	Ft Meyers, Florida	[REDACTED]	Balloon
26	Yuma, Arizona	[REDACTED]	Astro (METEOR)
27	Miami, Florida	[REDACTED]	Astro (METEOR)
27	Bristol, Tennessee (CASE MISSING)	Civilian Airlines	Astro (STAR)
28	Oklahoma City, Oklahoma	Multi	Astro (METEOR)
29	Houma, Louisiana	Military (RADAR)	Other (ANOMALOUS PROJ)
29	Worcester, Ohio	Civilian	Insufficient Data
29	Great Falls, Montana	[REDACTED]	Balloon
30	Detroit, Michigan	Military (RADAR)	Aircraft
31	Baltimore, Maryland	Civilian	Insufficient Data
31	Terre Haute, Indiana	[REDACTED]	Astro (MOON)

ADDITIONAL REPORTED SIGHTINGS (NOT CASES)

DATE	LOCATION	SOURCE	EVALUATION
1	Greenwich, Connecticut	Newsclipping	
1-2	Wilmington, Delaware	Meteor Society	
1-2	Hamilton, Ohio	Newsclipping	
7	Mount Vernon, New York	Newsclipping	
7	Brooklyn, New York	Newsclipping	
11	Cape Cod, Massachusetts	Newsclipping	
13	Birmingham, England	Newsclipping	
21	Knoxville, Tennessee	Newsclipping	
22-23	Caldwell, New Jersey	Munsich (Ltr)	
24	Cincinnati, Ohio	Newsclipping	
29	Washington, New Jersey	Newsclipping	