

PROJECT 10073 RECORD CARD

1. DATE 31 December 1958		2. LOCATION Vicinity Incirlik AFB, Turkey		12. CONCLUSIONS ☐ Was Balloon ☐ Probably Balloon ☐ Possibly Balloon	
3. DATE-TIME GROUP Local _____ GMT 31/2315Z		4. TYPE OF OBSERVATION ☐ Ground-Visual ☐ Ground-Radar ☒ Air-Visual ☐ Air-Intercept Radar		☒ Was Aircraft ☐ Probably Aircraft ☐ Possibly Aircraft	
5. PHOTOS ☐ Yes ☒ No		6. SOURCE Military		☐ Was Astronomical ☐ Probably Astronomical ☐ Possibly Astronomical	
7. LENGTH OF OBSERVATION not given		8. NUMBER OF OBJECTS one		9. COURSE not given	
10. BRIEF SUMMARY OF SIGHTING Obj of dull color, long & slender w/glow (probably jet tail pipe) in rear. No other lights. Obj was silhouetted against lights of city of Adana. Unable to estimate size, but appeared smaller than F-100. No tail or wing surface observed. Obj proceeded fm Adana to Incirlik AB, then climbed rapidly out of sight.				11. COMMENTS The maneuvers & description are characteristic of an a/c..	

EDWIN

2 JAN 53 04 00

TELEPHONED
TO Collected C.L. asked where
NO. 71222
TIME 440 P
Date 2 Jan 53
By: HL

RA236

XSQW20SHQA007

PP RJEDSQ

DE RJEZHQ 323

P 010900Z

FM COMDR 58 ARSQ WHEELUS AB LIBYA

TO CSAF WASHDC

CINCUSAFE WSBM GER

COMDR ARS (ATLANT) DET 3

8 AR SUPB

LIFO COMDR 17 AF WHEELUS AB LIBYA

1
24E4
3
44X22

COMDR DET 13 TUSLOG

COMDR ATIC WPAFB OHIO

BT

UNCLAS EFTO/CIRVIS CITE 58 ARO 1-A-2 X CONFIRMED

AT THREE ONE SLASH TWO THREE ONE FIVE ZULU THE AIRCREW OF SIERRA CHARLIE
DASH FIVE FOUR SERIAL NUMBER TWO SIX SIX FIVE CMM FIVE EIGHT AIR RESCUE
SQUADRON CMM ALFA PAPA OSCAR TWO THREE ONE CMM WHILE FLYING IN THE
VICINITY OF INCIRLIK AIR BASE CMM TURKEY CMM SIGHTED AN UNIDENTIFIED
FLYING OBJECT ON UNIFORM FOXTROT OSCAR WAS DULL COLOR CMM NO POSITION

what color?

PAGE TWO RJEZHQ 323

OR OTHER LIGHTS CMM BUT WAS SIHOUETTED AGAINST THE LIGHT OF THE
CITY OF ADANA CMM IN BRIGHT MOON LIGHT PD OBJECT APPEARED RELATIVELY
LONG AND SLENDER WITH GLOW CMM PROBABLY JET TAIL PIPE CMM AT REAR
PD UNABLE TO ESTIMATE EXACT SIZE BUT APPEARED SMALLER THAN FOXTROT
DASH ONE ZERO ZERO PD NO WINGS OR TAIL SURFACE OBSERVED PD FIRST
SIGHTED AT ALTITUDE OF APPROXIMATELY FIVE THOUSAND FEET CMM AND
APPROXIMATE TRACK OF ZERO SEVEN ZERO DEGREES CMM THE CIVILIAN
AIRPORT AT ADANA CMM THEN PROCEEDED AT HIGH RATE OF SPEED OVER
CITY TO AREA OF INCIRLIK AIR BASE CMM FLEW PARALLEL TO RUNWAY ZERO
FIVE ZERO CMM THEN TURNED TO APPROXIMATE HEADING OF ZERO NINE ZERO
DEGREES AND CLIMBED RAPIDLY OUT OF SIGHT PD UNABLE TO ESTIMATE
ALTITUDE BUT ESTIMATE ONE ZERO TO ONE FIVE MILES AWAY WHEN OBJECT
WENT OUT OF SIGHT PD INCIRLIK TOWER WAS NOTIFIED AND TOWER ADVISED
TO KNOW FRIENDLY AIRCRAFT IN AREA PD GOLF CHARLIE ALFA WAS NOT
IN OPERATION

Note:

ASTRONOMY

Winter Stars Shine

The December skies offer the astronomer much to observe: the brilliant planet Mars, several prominent constellations and the Geminid shower of meteors.

By JAMES STOKLEY

➤ **ALTHOUGH RAPIDLY** drawing away from us, the planet Mars is still conspicuous in the southern evening sky.

From a distance of about 49,700,000 miles on Dec. 1, it recedes to 67,200,000 miles at the end of the month. At the same time it drops in brightness a full magnitude, on the astronomer's brightness scale; that is, about 40% of what it was Dec. 1. But even then it will shine more brilliantly than all but one of the stars now visible.

The accompanying maps show the skies' appearance at about 10 p.m., standard time, on the first of December. By the middle of the month they will look this way at about 9:00 p.m. and at the end they will have the same appearance at eight o'clock. Mars is high in the south, in the constellation of Aries, the ram.

Toward the east and southeast is a group of prominent constellations, containing many bright stars, that will be high in the south on midwinter evenings. This group is responsible for the brilliance of the winter skies.

Hyades and Pleiades

To the left of Mars stands Taurus, the bull, with a first-magnitude star that is distinctly red in color, named Aldebaran. This is part of a smaller, V-shaped, group of stars called the Hyades. Higher and to the right of the Hyades there is another and more compact cluster called the Pleiades. Here six stars can normally be seen with the naked eye, but use of a pair of binoculars will reveal many more.

Below and to the left of Taurus is one of the most prominent of all constellations. This is Orion, the only constellation visible from the United States that contains two stars of the first magnitude. These are Betelgeuse and Rigel, whose positions are shown on the map. Between them are three stars in a row that form the belt of the warrior, the figure that the stars of Orion were supposed to form, as depicted on old star maps.

Low in the southeast and east are two star groups representing Orion's dogs. Canis major, the greater dog, is now rather low, but the star Sirius, which is in this constellation, shines brightly. This is the one star that exceeds the end-of-the-month brightness of Mars. However, when Sirius is as low as it is shown here its brightness is somewhat dimmed by the amount of atmosphere that its light has to penetrate. When it is higher in the sky, it has a shorter path through the earth's layer of air, so there is less absorption.

The other dog is the lesser one, Canis

Minor. In it is the star called Procyon. Above it, partly on the map of the northern sky, partly on the southern, are Gemini, the twins. The two bright stars here are Castor and Pollux, the latter the brighter. Still higher in the northeast, is Capella in the constellation of Auriga, the charioteer. And overhead, at the times for which the maps are drawn, is Perseus, the champion, a constellation which includes the famous variable star Algol. Its light is dimmed every few days as a darker companion passes in front of the brighter component, and causes a partial eclipse.

In the northwest there are still visible two stars that were prominent on summer evenings; like Sirius, they are dimmed by reason of their low altitude. Just above the horizon is Vega, all that is shown of Lyra, the lyre. Above it is Cygnus, the swan, in which Deneb is the brightest star.

Another planet, Venus, is just coming into the evening sky. At the end of December it sets nearly an hour after the sun. It may be seen near the southwestern horizon as dusk is falling.

In the early morning, just before sunrise, Jupiter may be seen low in the southeast. It is nearly as bright as Mars is at the beginning of the month.

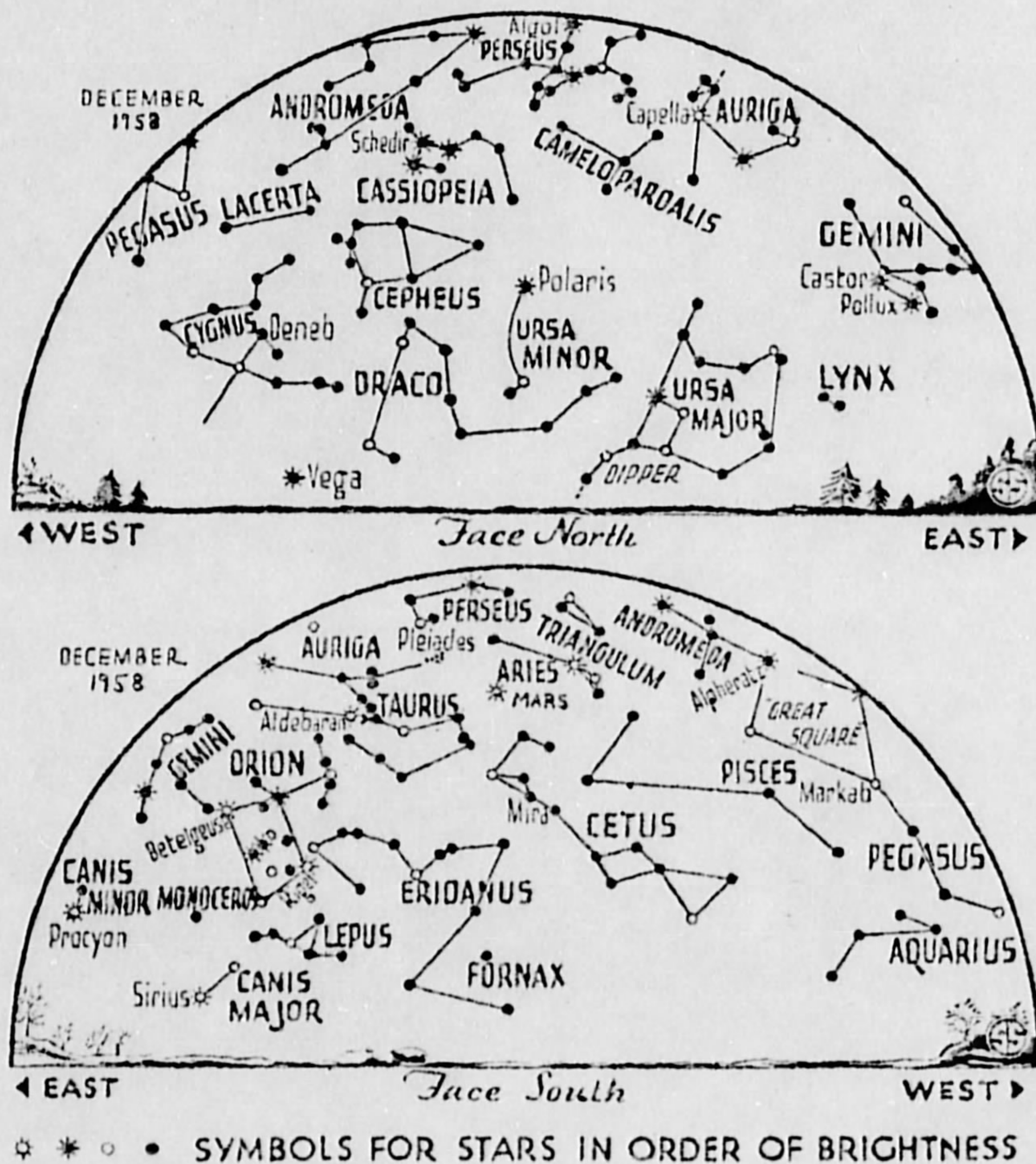
Mercury, on Dec. 29, will be at the position called "greatest western elongation,"

when it is farthest west of the sun, and rises well before sunrise. About that time, it is possible to glimpse it also in the southeast, as dawn is breaking. Saturn cannot be seen at all in December; on the 20th it is in the same direction as the sun, far out beyond it.

The name "planet" really means a wanderer. They were so-called in ancient time when men noticed that, unlike the stars, which seem to remain in the same relative positions, they move around among the constellations.

Actually the stars also are moving, and some at high speeds, but they are at such vast distances that even a whole lifetime is not enough to show a perceptible change as seen with the naked eye. From accurate astronomical measurements, however, their motions across the sky have been determined. Because of these movements, the constellation figures are all changing. Fifty thousand years ago they looked very different, to the primitive cave men in Europe and other parts of the world, from the appearance they present today. And 50,000 years hence, our descendants will see them still differently. Orion, the great dipper, Taurus and all our familiar groups, will be gone completely, superseded by entirely different configurations.

The sun is also a star, the nearest of all, and it, too, is moving through space, in the general direction of the star Vega. But as it goes, at a speed of about 12 miles per second, it carries the earth, as well as the other planets, along with it. Therefore it is not entirely correct to say, as we often do, that the path of the earth is an ellipse,



SCIENCE FIELDS

PHYSICS

H-Bomb Explosion Causes Artificial Aurora

➤ A HYDROGEN BOMB exploded high in the air can cause a bright artificial aurora.

The man-made auroral display was seen by J. G. Keys, observer-in-charge at Apia Observatory, New Hebrides Islands, at 10:51 Greenwich Time on Aug. 1. At the same time there was a sudden increase in magnetic activity at Apia.

A hydrogen bomb was exploded by U. S. scientists high in the upper atmosphere over Johnston Island at approximately the time the aurora appeared and the magnetic disturbance started.

Auroras are rarely seen in tropical regions, and only one other has been reported at Apia, on May 13 to 16, 1921. Those auroras that are seen in the tropics have always been associated with severe world-wide magnetic disturbances.

However, the Apia disturbance definitely was not world-wide, Dr. A. L. Cullington of New Zealand's Department of Scientific and Industrial Research reports in *Nature* (Nov. 15).

Therefore, Dr. Cullington concludes:

"There seems to be little doubt that the unusual magnetic effects recorded at Apia are related to this explosion and that the manifestation seen at Apia was a man-made or artificial aurora due to a nuclear explosion in the upper atmosphere."

Since a study of the effects due to this explosion may help understanding of the theory of magnetic storms and auroras, Dr. Cullington asked other stations in the Central Pacific to search their records for abnormal magnetic activity at the time.

Science News Letter, November 29, 1958

EDUCATION

Bent to Science Starts In Home Before School

➤ WHAT HAPPENS to a child while being raised in the home long before school days may determine whether he is likely to be a scientist or go into some other life work, persons at the Edison Foundation Conference in Cincinnati learned.

Dr. Anne Roe, adjunct professor of psychology, New York University, finds the differences that make most people interested in things and other people most interested in people stem from the earliest experiences in infancy. The "thing" persons can become scientists and the "people" persons develop toward non-science fields.

Parents who want to raise their children to be scientists, Dr. Roe advises, should refrain from:

Treating them as overprotected "mothers' children," giving them everything they want.

Suppressing natural curiosity by overprotection, such as stopping the handling of things around the house due to fear of breaking.

Not letting them follow the interests that develop from things attracting them naturally.

While basic orientations toward science and non-science do begin almost in the cradle, schools do have a chance to reinforce science motivation and give essential training, Dr. Roe emphasized. They can also direct the attention of those who have basic abilities to the advantages of science careers.

Science education needs to do more than discipline minds and impart facts, Dr. Roe believes. It is necessary to urge the potential scientist to give free play to fancy and also be respectful of the method and spirit of inquiry.

Science News Letter, November 29, 1958

PHYSIOLOGY

Low Temperatures Lessen Kidney's Blood Flow

➤ PROGRESSIVE induced reduction in body temperature probably causes a parallel decrease in the kidney's blood flow and glomerular filtration rate.

This was reported by Dr. John H. Moyer of the Hahnemann Medical College in Philadelphia at a conference on hypothermia sponsored by the New York Academy of Sciences. Hypothermia refers to body temperatures less than the normal.

Despite the decrease in glomerular filtration and renal blood flow during subnormal temperatures, Dr. Moyer said, there is not a similar decrease in urine volume or sodium excretion until the body is brought to temperatures below 26 degrees centigrade (about 79 degrees Fahrenheit). Below this point urine volume and sodium excretion diminish progressively with temperature reduction.

Reduction in kidney function is probably not a result of the decrease in blood pressure concomitant with hypothermia, since raising the blood pressure with a special agent does not affect the altered kidney function.

In another report to the conference, Dr. Ralph W. Brauer of the Naval Radiological Defense Laboratory in San Francisco told how circulation in the liver is altered in hypothermia. This is due to increased blood viscosity and to a fluid shift from extracellular to intracellular resulting in increased liver volume.

Effects on the functional elements of the liver, said Dr. Brauer, include changes in secretory activity such as a sharp reduction in bile flow.

Dr. Robert M. Berne of Western Reserve University in Cleveland reported on the effect of hypothermia on the functions of the heart. Contractility or myocardial heart tissue is not impaired in hypothermia, he said. On the other hand, both the oxygen consumption of the heart and coronary resistance were found to be reduced in hypothermia. The reduction in coronary resistance may be due to a direct effect of cold on the coronary vessels.

Science News Letter, November 29, 1958

MEDICINE

Blood in the Eye Removed by Heart Drug

➤ A DRUG used to treat certain heart conditions can help remove damaging blood from the eye.

This is reported by Dr. Robert Sinsky, University of California at Los Angeles Medical School, who has been studying eye hemorrhages known as hyphemas.

A hyphema is a hemorrhage into the anterior chamber of the eye, which lies between the iris and cornea. Hyphemas often occur when an object, such as a ball, hits the eye, or following certain types of eye surgery. If the blood remains in the chamber for a long period of time, serious damage to the eye may result.

Dr. Sinsky was able to trace the course of the blood in the eye by tagging red blood cells with radioactive isotopes. He found the red cells can leave the chamber as whole red cells without hemolyzing or breaking up first. They leave in large numbers in the first two hours after the hemorrhage but slow down their rate of exit considerably after that.

He also found intravenous injections of Diamox, a drug used to treat certain heart conditions, increases the rate at which the blood leaves the chamber by 21% over untreated control rabbits with hyphemas. The reason Diamox works is unknown as yet.

As a result of these findings, Diamox is being used clinically to treat hyphemas. Drugs which have been used to treat hyphemas by dilating or narrowing the pupils of the eye were found not to influence the rate at which blood leaves the eye.

Science News Letter, November 29, 1958

GEOGRAPHY

Sahara-Like Desert Exists in South America

➤ A DESERT in South America with moving sand dunes reminiscent of the Sahara is described by Dr. Raymond E. Crist of the University of Florida in a report to the Smithsonian Institution.

There, only a little over 50 miles from bustling, modern, oil-rich Maracaibo, Venezuela, people live today very much as they did on the Old World desert of Arabia in the days of Abraham.

Although an international boundary runs through this desert of Guajira, the Venezuelan and Colombian governments that technically have jurisdiction have been forced to recognize local laws and customs and to grant a high degree of local cultural autonomy.

The people continue to be Guajiros, speaking their own language, wearing their own dress, and living their own nomadic life.

As in most arid lands, rights to water are more important than rights to land. And, as in the Sahara or in the Arabian Desert, a large part of the life of the people is carried on around wells or waterholes. People come to "casimbas," as they are known, in a constant stream from many kilometers in all directions.

Science News Letter, November 29, 1958

of the sea, of winds, whirlpools, coastlines, whales and plankton.

AN INTRODUCTION TO FOURIER METHODS AND THE LAPLACE TRANSFORMATION—Philip Franklin—*Dover*, new ed., 289 p., paper, \$1.75. Unabridged reprint of *Fourier Methods*, first published in 1949.

LIGHT—Alexander Efron—*Rider*, 127 p., illus., paper, \$2.25. Introduces general reader to the phenomena of reflection, refraction, nature and spectrum of light waves with chapter on optical instruments.

LOGIC MACHINES AND DIAGRAMS—Martin Gardner—*McGraw*, 157 p., illus., \$5. Traces the history of logic devices and projects their future.

MODERN SCIENCE QUIZ BOOK—Anne Orth Epple and Lewis E. Epple, Jr.—*Platt*, 54 p., illus., \$1.50. 650 questions and answers in various fields of science. Ages 10 to 16.

RESEARCH IDEAS FOR YOUNG SCIENTISTS—George Barr—*Whittlesey House*, 142 p., illus. by John Teppich, \$3. Leads children to observe and do their own experiments at home without laboratory equipment.

SPACE SATELLITE: The Story of the Man-Made Moon—Lee Beeland and Robert Wells, preface by John P. Hagen—*Prentice-Hall*, rev. ed., 78 p., illus. by Jack Coggins, \$2.95. Popular explanation of the principles of rocketry and the Minitrack tracking system.

SOVIET WRITINGS ON EARTH SATELLITES AND SPACE TRAVEL—Ari Sternfeld and others—*Citadel*, 253 p., illus., \$3.95. Collection of Russian stories on space science and the three sputniks, in English.

SPACE TRAVEL—Willy Ley—*Guild Press*, (*Simon & Schuster*), 44 p., illus. by John Polgreen, \$1. Fourth and last of Adventure in Space series.

STRUCTURAL CONVERSIONS IN CRYSTALLINE SYSTEMS AND THEIR IMPORTANCE FOR GEOLOGICAL PROBLEMS—Wilhelm Eitel—*Geological Soc. of Am.*, 183 p., illus., \$3. Monograph on the results of research in structural conversions.

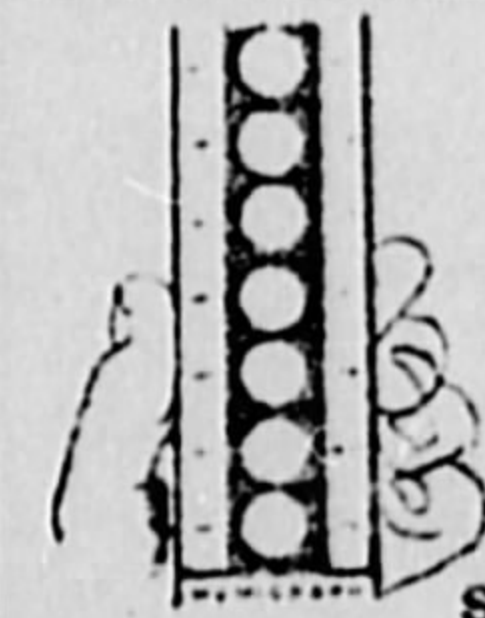
THE STRUCTURE OF ARITHMETIC AND ALGEBRA—May Hickey Maria—*Wiley*, 294 p., \$5.90. Fundamental concepts explained for the non-science student and the teacher of secondary school mathematics.

THINK, MR. PLATYPUS—Anita Hewett—*Sterling*, 32 p., illus. by Anne Marie Jauss, \$2.50. Easy-to-read children's book about the habits of platypuses.

TRENDS IN GENETIC ANALYSIS—G. Pontecorvo—*Columbia Univ. Press*, 145 p., illus., \$4. Course of lectures reappraising the theory of the gene.

THE TWO ENDS OF THE LOG: Learning and Teaching in Today's College—Russell M. Cooper, Ed.—*Univ. of Minn. Press*, 317 p., \$4. Based on papers presented at a conference on col-

(Continued on page 350)



TELLS HUMIDITY AT A GLANCE
 If you can tell the difference between pink and blue, you can read humidity from 10% to 80%!
 Hundreds of thousands of Humigraphs now in use, in industry, science, military installations! Usable many months.
 Pack of 5 Humigraph Cards and brochure—postpaid in U. S. only. **\$1.00**
SCIENCE MARKETS
 Dept. 300, 7063 N. Clark, Chicago 26, Illinois

Best Book Contest for 1953

\$1500 Cash Awards plus 40% royalty. All types of manuscripts invited. For Contest rules and details of famous publishing plan, write for free Brochure 3N
Pageant Press, 101 Fifth Ave., N. Y. 3

nearly circular. Actually we are moving in a helix, a three-dimensional figure like that of a spring, or a corkscrew. However, relative to the sun, the paths of the planets are ellipses.

Mercury, innermost planet, travels around the sun most rapidly, at a speed averaging nearly 30 miles per second, while Pluto, most distant, has an orbital velocity of a little less than three miles per second. The earth's speed is 18.5 miles per second, and that of Mars slightly more than 15.

Because of this, the apparent motions of the planets in the sky, against the background of distant stars, is a combination of their movement and ours.

"Retrograde" Mars

On Oct. 1, Mars was close to the Hyades, the little group in Taurus in which Aldebaran is found. Now it is well over towards Aries. That is, apparently it has been moving toward the west, although actually all the planets move around the sun in an easterly direction. Now, since the earth has gone past, Mars will cease this backward, or "retrograde," movement. On Dec. 20, it will be stationary; after that it will resume its "direct" motion, toward the east.

About Dec. 13, there will be a favorable opportunity, if the skies are clear, to observe meteors, or "shooting stars," of the Geminid shower. They will be seen to best advantage after midnight, when perhaps as many as 40 an hour may be detected. These will seem to radiate from the constellation of Gemini, hence the name. Actually, these meteors, which are not much larger than grains of sand, are moving in parallel paths around the sun in a huge swarm, which we encounter every December. Sometimes the bright moon may interfere with them. This month, however, the moon is new only three days before the date of the maximum. It will therefore set early in the evening, and be well out of the way before the hours when the Geminids are at their best.

Celestial Time Table for December

Dec.	EST	
2	9:43 p.m.	Algol (variable star in Perseus) at minimum brightness.
3	8:24 p.m.	Moon in last quarter.
8	7:00 p.m.	Moon nearest, distance 224,600 miles.
9	10:00 p.m.	Mercury in inferior conjunction (between earth and sun).
10	12:23 p.m.	New moon.
13	early a.m.	Meteors of Geminid shower visible.
17	6:52 p.m.	Moon in first quarter.
20	2:38 a.m.	Algol at minimum.
	7:00 a.m.	Saturn in same direction as sun.
	4:00 p.m.	Moon farthest, distance 251,600 miles.
21	11:56 p.m.	Moon passes Mars.
22	3:40 a.m.	Winter solstice—winter begins in Northern Hemisphere.
	11:27 p.m.	Algol at minimum.
25	8:16 p.m.	Algol at minimum.
	10:54 p.m.	Full moon.
29	9:00 a.m.	Mercury farthest west of sun—visible low in southeast just before sunrise for a few days about now.

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

Science News Letter, November 29, 1958

1958

FOUR IN TRUCK CHASED BY UFO: Four Los Angeles teen-agers driving near the Mexican border in southern California were startled last Dec. 1st by a giant sphere with flashing green and red lights, which chased their pick-up truck for 45 miles along the highway before it finally gave up and flew away.

Before it left, however, it blasted the truck with a "white ray", which stopped their watches, stopped the functioning of the dials on the instrument panel, and blistered the paint on the truck. Connie Males, 18, - one of the four - described the light as "an unearthly shade of green." The police to whom the incident was reported disagree with the claim that the truck paint was blistered. Said one of the police, in making his report, "Anything can happen, but this is improbable."

No Case (Information Only)

10 December 1958
Floyada, Texas

1958

...A close sighting was made on a ranch near Floyada, Texas, on the evening of Dec. 10th, when a glowing oblong light was observed by several ranchers. One of them, Q. D. Williams, said that he watched the light moving in circles at about a 100 foot altitude, 1/4 mile away. It was visible for 30 minutes, and was taking about 10 seconds to complete each of its weird circular revolutions.

NO CASE INFORMATION ONLY

22 Dec 58
Poland

SOURCE: IAPA - SEP 63



Photo of UFO taken by Dr.
Stanislaus Kowalczewski
over Krynica-Murzyňa, Pol-
and, on Dec. 22, 1958.