

PROJECT 10073 RECORD CARD

1. DATE 30 July 1957		2. LOCATION Pacoima, Calif		12. CONCLUSIONS ☐ Was Balloon ☐ Probably Balloon ☐ Possibly Balloon ☐ Was Aircraft ☐ Probably Aircraft ☐ Possibly Aircraft	
3. DATE-TIME GROUP Local _____ GMT 31/0419 to 0444Z		4. TYPE OF OBSERVATION ☒ Ground-Visual ☐ Ground-Radar ☐ Air-Visual ☐ Air-Intercept Radar		☒ Was Astronomical Arcturus ☐ Probably Astronomical ☐ Possibly Astronomical	
5. PHOTOS ☐ Yes ☒ No		6. SOURCE Civilian		☐ Other _____ ☐ Insufficient Data for Evaluation ☐ Unknown	
7. LENGTH OF OBSERVATION 25 minutes		8. NUMBER OF OBJECTS one		9. COURSE SW to W stationary	
10. BRIEF SUMMARY OF SIGHTING One obj round, size of dime, color white, object moving slowly SW to W, blinking white light, no sound. Obj finally blinked out. Object rptd at 45 dgr elev 270 dgr azimuth at initial sighting and disappearance.				11. COMMENTS Arcturus in position rptd.	

30 31/0431Z

1 Witness

59117 46

NTFD CAPT

010320Z

WPC036 YDD033 XYC024 XDE011/'? -007XXJBE001

08 08

OO RJEDEN RJEDWP RJEPHQ

ZDK

JBE002

OO RJEDEN RJEDWP RJEPHQ

DE RJWPJB 3E

O 311710Z

FM COMDR 669TH ACWRON BORHUE CALIF

TO RJEDEN/COMDR ADC ENT AFB COLO SPRINGS NOLO

RJWPJB/COMDR 27TH ADIV DEF NORTON AFB CALIF

RJEDWP/COMDR AIR TECH INTELLIGENCE CENTER WRIGHT HATTERSON AFB OHIO

RJEPHQ/DIRECTOR OF INTELLIGENCE HQTRS USAF WASH D C

BT

UNCLAS 6690PS 080-Y PD UFOB PD 1.A.ROUND. B.DIME. C.WHITE. D.ONE.

E.NONE. F.NONE. G.NONE. H.NONE. I.NONE 2.A./BLINKING WHITE LIGHT.

B.45/ ~~DEGREE~~ 270 DEGREE. C.45 DEGREE AT 270 DEGREE. D.SOUTHWEST

TO WEST MOVING SLOW. E.BLINKED OUT. F.0419Z TO 0444Z. 3.A.GROUND

VISUAL. B.NONE. C.NONE 4.A.31 JULY 0419Z. B.DARK. 5.BE 3216 SAN

FERNANDO 34 16 NORTH 618 28 WEST. 6. ~~HOUSE~~ T 28 YEARS ~~HOUSE~~

~~HOUSE~~ PACOIMA, CALIFORNIA. ~~HOUSE~~ WIFE PHONE EMPIRE

96332. 7.A.CLEAR. B.NONE C.NONE. D.20 MILES. E.NONE F.NONE 8.NONE

9.NONE 10.NONE. 11.JOHN W SHARP 1ST LT SENIOR DIRECTOR. POSSIBLE

LIGHT CIVILIAN TYPE AIRCRAFT WITH FAULTY TAIL LIGHT AND AT SUCH A

DISTANCE FROM OVSERVER THAT IT COULD NOT BE HEARD. 12.NONE

AVAILABLE.

BT

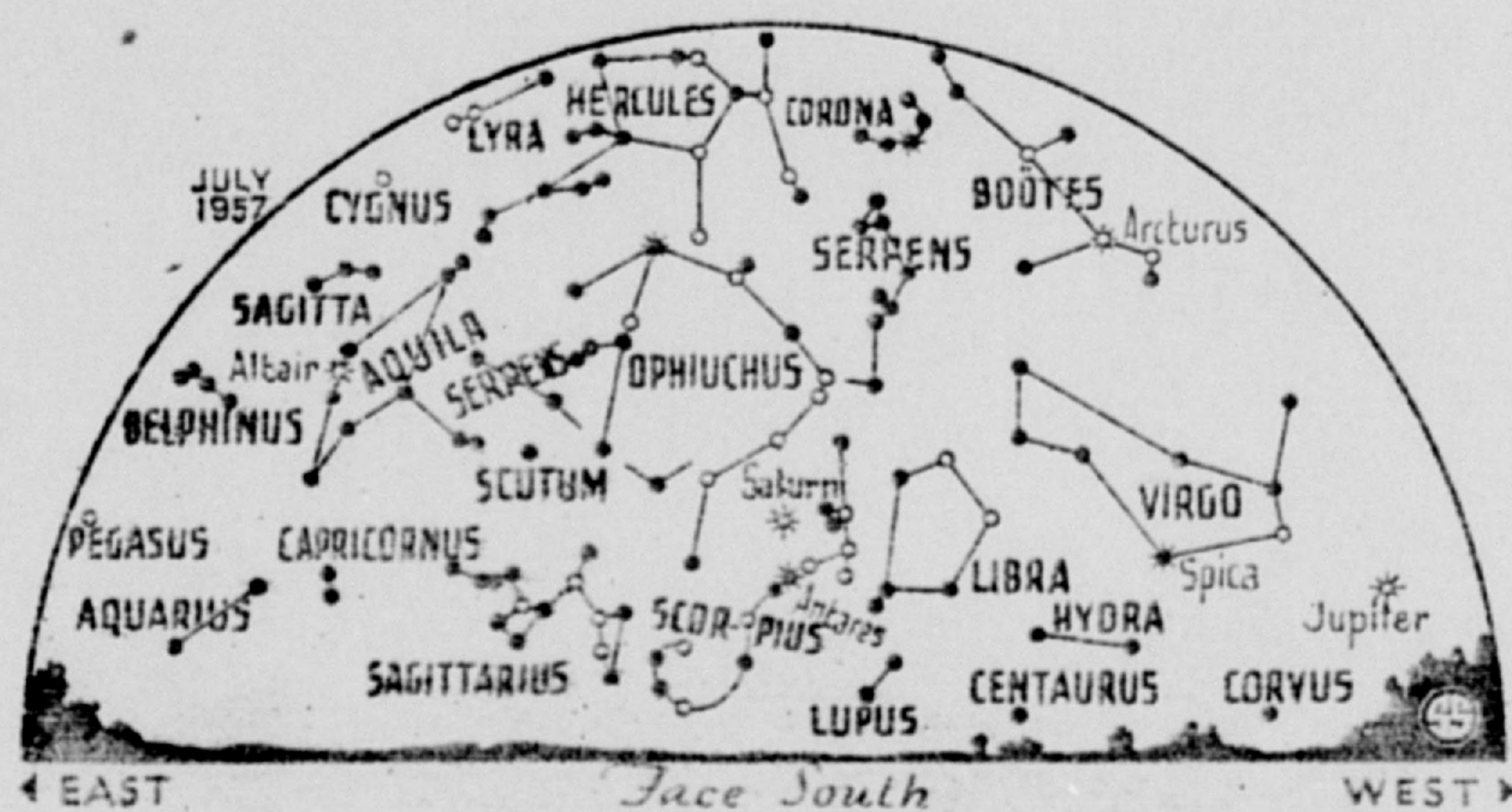
31/1730Z JUL RJWPJB

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PREVIOUSLY RELEASED

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2
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TWO

Continued on page 2



◊ * ◦ • SYMBOLS FOR STARS IN ORDER OF BRIGHTNESS

This object is visible only through a telescope. A small one, say with a lens three inches in diameter, shows it as an oval patch of light, while a larger instrument reveals it as a ring of nebulosity. This is called the "ring nebula in Lyra," a member of the class of "planetary" nebulae. They were called this in the early days because, through smaller telescopes, they resembled planets.

At the center of the Lyra ring there is a star of the 15th magnitude, visible only through good-sized telescopes. Somehow, the radiations from this star seem to excite the whole nebula to brightness.

But even this does not end the interesting points about Lyra.

The star delta Lyrae, for example, is also shown by a pair of binoculars to be double. And beta Lyrae is a famous variable star. Every 12.9 days it drops from magnitude 3.4 to 4.5. At maximum it is brighter than its neighbor, gamma, but at minimum it is fainter. These changes can be observed with the naked eye.

Thus Lyra, small though it is, offers much of interest to the amateur astronomer.

Celestial Time Table for July

JULY EST

2	8:00 p.m.	Earth farthest from sun for 1957, distance 94,452,000 miles
3	5:12 a.m.	Moon passes Jupiter
	midnight	Mercury on far side of sun
4	7:09 a.m.	Moon in first quarter
8	12:14 p.m.	Moon passes Saturn
11	2:00 p.m.	Venus passes Mars
	5:50 p.m.	Full moon
15	10:00 p.m.	Moon farthest from earth, distance 251,900 miles
19	9:17 p.m.	Moon in last quarter
26	11:28 p.m.	New moon
28	5:00 a.m.	Moon nearest earth, distance 223,400 miles
	9:44 a.m.	Moon passes Mars
29	3:02 a.m.	Moon passes Venus
30	6:41 p.m.	Moon passes Jupiter

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

Science News Letter, June 22, 1957

Books of the Week

For the editorial information of our readers, books received for review since last week's issue are listed. For convenient purchase of any U. S. book in print, send a remittance to cover retail price (postage will be paid) to Book Department, Science Service, 1719 N. Street, N. W., Washington 6, D. C. Request free publications direct from publisher, not from Science Service.

AVIATION FACTS AND FIGURES 1957—compiled by Rudolf Modley and Edward B. Hincks, edited by Ben S. Lee—*American Aviation Publications*, 120 p., illus., paper, \$1.00. A compilation of facts gleaned from hundreds of sources.

BEAUTYWAY: A Navaho Ceremonial—Myth recorded and translated by Father Berard Haile, variant myth recorded by Maud Oakes and sand paintings recorded by Laura A. Armer, Franc J. Newcomb and Maud Oakes, edited with commentaries by Leland C. Wyman—*Pantheon*, Bollingen Series LIII, 218 p., illus., \$8.50. Containing beautiful reproductions of the Indian sand paintings and a supplement with the Navaho text of the myth.

BLUEPRINTS FOR BETTER READING: School Programs for Promoting Skill and Interest in Reading—Florence Damon Cleary—*Wilson*, 216 p., \$3.00. For teachers and others concerned with the guidance of children's reading.

CLINICAL USE OF RADIOISOTOPES—William H. Beierwaltes, Philip C. Johnson and Arthur J. Solari—*Saunders*, 456 p., illus., \$11.50. At the University of Michigan, where two of the authors are on the faculty, every medical student is assigned to the Clinical Radioisotope unit during his junior year. This text is for such students.

THE CLOSING COLLEGE DOOR—Council for Financial Aid to Education, 14 p., illus., paper, single copies free upon request direct to publisher, 6 East 45th St., New York 17, N. Y. Facts about higher education and suggestions of what you can do to put your foot in the door and keep it from slamming shut.

THE COAST AND GEODETIC SURVEY: 150 Years of History—A. Joseph Wraight and Elliott B. Roberts—*Govt. Printing Office*, Department of Commerce, 90 p., illus., paper, 35 cents. Telling of the work and history of the first technical bureau of the U. S. Government. In 1807, when

useful advice on what to do to prevent too frequent or too serious upsets. (See SNL, p. 386.)

HOW TO FARM YOUR FOREST: A Guide for Woodland Owners in Southern Illinois—Leon S. Minckler and John F. Hosner—*Central States Forest Experiment Station*, Miscellaneous Release No. 11, 68 p., illus., paper, free upon request direct to publisher, P. O. Box 760, Carbondale, Ill. The "left over" land after the better parts are used for crops, is, nevertheless, part of the farm and should be cultivated to bring in an income. This booklet tells how to get income from woodland.

THE INFECTIOUS DISEASES OF DOMESTIC ANIMALS: With Special Reference to Etiology, Diagnosis and Biologic Therapy—William Arthur Hagan and Dorsey William Bruner—*Comstock Publishing Associates*, 3d ed., 963 p., illus., \$10.50. Covering not only pathogenic bacteria but also fungi, protozoa and viruses.

INTERLINGUA: Tool of International Communication—Alexander Gode—*Science Service*, 10 p., paper, free upon request direct to publisher, Division of Interlingua, 80 East Eleventh St., New York 3, N. Y. Explaining how this new language was constructed and how it is used. Contains a summary written in Interlingua.

INTERNATIONAL CLOUD ATLAS: Volume II—World Meteorological Organization (International Publications)—224 plates, \$4.45. A collection of beautiful photographs in black and white and color showing various kinds of clouds and other aspects of the sky. Some are taken from the ground and others from airplanes.

LIBERTY IS ALWAYS UNFINISHED BUSINESS—American Civil Liberties Union, 96 p., paper, 50 cents. Annual report of the Union discussing such topics as the freedom of speech and association, academic freedom, and the pressures directed against the printed word, stage and screen and radio-television.

DE FIELDS

MEDICINE

Technique Makes Injection Painless

► THE ART of giving completely painless injections with a hypodermic needle has been explained by Dr. Janet Travell, Cornell University Medical College, to the American Medical Association meeting in New York.

Dr. Travell takes exception to the popular notion that the jab of a hypodermic needle must be expected to cause some pain.

She has devised a two step-procedure that eliminates pain and removes the fear of "the needle."

The first step is to spray the skin with a fine stream of coolant that chills but does not freeze the skin. With the skin temperature down to below 10 degrees centigrade the needle is quickly inserted through the skin and into an area of muscle found to have no "deep tenderness."

By avoiding the so-called trigger sites of muscular pain, the pain of the injection is done away with, Dr. Travell explained.

Normal skeletal muscle is completely insensitive to a needle, but with the stresses and strains of usage muscles develop local areas of sensitivity that trigger off pain sensations.

The trick is to miss these with the needle, and a quick manipulation of the area beforehand is all that is needed to find them. The trigger sites are about the size of a fingernail and feel like a washboard to the touch.

The painless procedure can be taught to a person in five minutes and should be standard practice in mass inoculations, Dr. Travell said.

Science News Letter, June 22, 1957

PUBLIC HEALTH

Summer Time Filled With Dangers, Doctors Report

► SUMMER and outdoor activities have many good effects on man but also many bad ones, a study of Canadians by Drs. Norman M. Wrong and H. R. Ruttan of the University of Toronto shows.

The bad effects are largely ignored by the average person and by many doctors who should be warning their patients about some of these dangers, they report.

Sunshine is one of the biggest potential hazards and suntans should be acquired with caution.

Too much sunlight produces sunburn immediately, but there are other changes which may not show up for years. The long term effects include aging of the skin and skin cancer, they say.

People should be warned sunbathing in

moderation is healthful but sun-baking may be dangerous.

The best preventive of skin cancer is to avoid sunburn at any age. A blonde or red-haired individual with blue eyes should be particularly careful.

Heat exhaustion, another common summer ailment, comes from exposure to excessive heat. It is more common when there has been no period of adaptation. It brings on a gradual weakness and loss of appetite which may progress to mental confusion, Dr. H. W. McIntosh of Vancouver, B.C., reports.

Heat stroke is a far more serious condition and results from a breakdown of the heat-regulating mechanism of the body. It frequently follows heat exhaustion and, without prompt treatment, can result in death.

Medical treatment includes continuous tepid baths or wrapping the victim in a wet sheet and spraying it with cool water.

The doctors reported on the summer hazards in the *Canadian Medical Journal* (May 15).

Science News Letter, June 22, 1957

PHARMACOLOGY

FTC Questions Antibiotic Industry

► DETAILED information on how much it costs to produce antibiotics and how much they are bringing on the market has been requested from the 18 manufacturers producing "wonder drugs."

The questionnaires being sent out by the Federal Trade Commission are the second that have been issued. The first were sent out last July by the Commission to check on production, patents and other data relating to antibiotic manufacture.

Among the facts requested by the Commission are those relating to bulk sales of the drugs and their dosage forms for 1956, the pricing policies for antibiotics during that year, and descriptive statements covering the history of the development period, 1943 through 1949.

Much public interest has been aroused about the pricing of modern medicine's wonder drugs and, although the questionnaires are by no means meant to be a policing device, they are designed to give the Federal Trade Commission up-to-date information on the economics of the mushrooming industry.

Since antibiotics represent so high a percentage of all prescription drugs sold today, they have become a fit subject for economic investigation, the Commission believes.

The request for information was developed with the cooperation of antibiotics manufacturers, John W. Gwynne, FTC chairman, emphasized in announcing the new questionnaires.

As rough drafts of the questionnaires were prepared, they were discussed with members of the industry and at the same time FTC investigators visited company plants to study production and research.

Science News Letter, June 22, 1957

TECHNOLOGY

Relay Sends Photo 40 Miles in 3 Minutes

► THE ARMY revealed it has a facsimile set that can flash a photograph to a person miles away five minutes after a photographer has clicked the shutter.

The high-speed photo transmitter is foreseen as having both revolutionary military and civilian uses. The set can flash vital military reconnaissance pictures by radio to a command headquarters in time to affect a critical decision. It could also change present methods of photo-reporting by daily newspapers.

Developed by the U. S. Army Signal Engineering Laboratories at Fort Monmouth, N. J., the set needs no darkrooms or messengers. It fits easily into the back of a radio-equipped jeep or car.

Described as the fastest facsimile set in the world, the equipment combines high-speed Army picture-sending techniques with a polaroid film that produces a finished print in one minute. Such a print can then be sent to a receiver 40 miles away, or thousands of miles away over standard telephone lines or long-range radio circuits.

In combat, for example, a front-line soldier with a specially equipped camera can take a picture of important enemy movements and get a three and one-quarter by four and one-quarter inch picture to his commander in five minutes flat.

The set was designed by John Erhart of the Signal Engineering Laboratories' Telecommunication Division and built under the sponsorship of the Signal Corps by the Times Facsimile Corporation, New York.

Science News Letter, June 22, 1957

MEDICINE

Bladder Can Be Grown Around Balloon

► HUMANS can grow completely new bladders around a plastic balloon implanted in them, Dr. A. Waite Bohne of the Henry Ford Hospital, Detroit, Mich., reported in an exhibit at the American Medical Association meeting in New York.

The plastic balloons, used in patients who have had their own bladders removed because of cancerous conditions, stimulate the body to grow a covering wall of muscles around the balloon which eventually becomes a new bladder.

The small balloon has three plastic tubes leading from it. Two of these are connected to drain the kidneys and the other passes to the outside of the body.

Seven cases of regenerating bladders have been made possible with the balloons, although a serious drawback in some of the cases has been a back flow of fluid from the bladder to the kidneys. Although plastic valves in the tubes could mechanically prevent this, they would cause a foreign body reaction, and lead to the development of kidney stones, Dr. Bohne explained.

Science News Letter, June 22, 1957

ASTRONOMY

Jupiter and Saturn Rule Skies

Jupiter and Saturn will be brighter than the other visible planets in the July skies while Vega, in the constellation Lyra, will be the brightest star seen at this time.

By JAMES STOKLEY

➤ TWO of the five planets ever visible to the naked eye will be more conspicuous than others on July evenings. Four planets in all can be seen.

Jupiter will be shining brightly in the southwest, in the constellation of Virgo, the virgin. On the scale of brilliance used by the astronomer it will be of magnitude minus 1.4.

Low in the south stands the constellation of Scorpius, the scorpion, the group in which Saturn may be seen. Its magnitude is plus 0.4. This makes it about a fifth as bright as Jupiter.

Both Jupiter and Saturn are shown on the accompanying maps, which depict the sky as it looks about 10:00 p.m. your own kind of standard time (add one hour for daylight saving time) at the first of July, or an hour earlier in the middle of the month. The other two planets that are now visible set before these times, so you will have to look for them quite early in the evening.

Venus, of magnitude minus 3.3, is about six times as bright as Jupiter, but it sets before twilight is completely ended, a little more than an hour after sunset. Look near the horizon in the west, about half an hour after the sun has gone down, and Venus should be clearly visible.

Mars, in the same part of the sky but far fainter, also sets early.

Of the second magnitude, it is considerably fainter than Venus, making it much more difficult to locate. However, Venus passes just to the north of Mars on July 11, so that evening they will be close together. Look at Venus with a pair of binoculars; you should see Mars close by.

As for the stars, Vega is the brightest seen on July evenings. This is high in the east, in Lyra, the lyre.

Below it toward the horizon is another first magnitude star, Deneb, in Cygnus, the swan. About as high in the southeast is Altair, in Aquila, the eagle. Since Altair is attended by two fainter stars, one just above and the other below, it can easily be identified.

High in the southwest is Arcturus, in Bootes, the bear-driver. Another way of finding this star is to start with the big dipper, part of Ursa Major, the great bear, in the northwest. The dipper now hangs with the bowl below. The bottom stars are the pointers, Merak and Dubhe, which indicate the direction of Polaris, the pole star, toward the right. But if you go upwards from the bowl of the dipper, and

follow the curve made by the stars that form its handle, Alioth, Mizar and Alkaid, they are called, around to the south, it will bring you to Arcturus.

Following it still farther, you reach Spica, in Virgo. Jupiter is in this group, farther to the right.

Finally, among stars of the first magnitude, there is Antares, in Scorpius, where Saturn is now seen. The star is just below the planet Saturn. Since Antares is quite red in color, it is not hard to find.

Lyra Leads the Way

Although it is a relatively small constellation, Lyra, which we can see high in the east on July evenings, has many points of interest. For one thing, it is where we are going!

It is often stated that the earth moves around the sun in an almost circular path, and this is correct. However, the sun itself, and all the planets with it, are moving through space at a speed of about 12 miles per second. Therefore the motion of the earth in space is not really in a circle, but in a helix, what is often—and mistakenly—called a spiral; the same path that one follows climbing a so-called "spiral" staircase. And the direction in which the sun, and the whole solar system, is traveling is toward Lyra.

Star of Distinction

As for Vega, that has several distinctions. It was the first star to be photographed, in 1850, from the Harvard College Observatory, when the recently developed daguerreotype process was applied to astronomy.

Another of Vega's distinctions is that about 12,000 years from now, as it was 14,000 years ago, Vega will be the Pole

Star. At that time Polaris, now the pole star, will be as far away from the pole, the point of the sky directly over the north pole around which all the stars seem to revolve once a day, as Vega is now.

This is because of a slow movement of the heavens called "precession of the equinoxes." It is similar to the movement of a top. As the top slows down, it "wobbles," that is, its axis does not stay in one position, pointing upwards, but slowly swings around in a circular movement.

Similarly, the earth wobbles, and, over the course of about 26,000 years, the place towards which our axis points in the northern sky moves around in a large circle. At present, in 1957, it happens to point nearly to the star we call Polaris. About the year 14,000 it will point towards Vega instead.

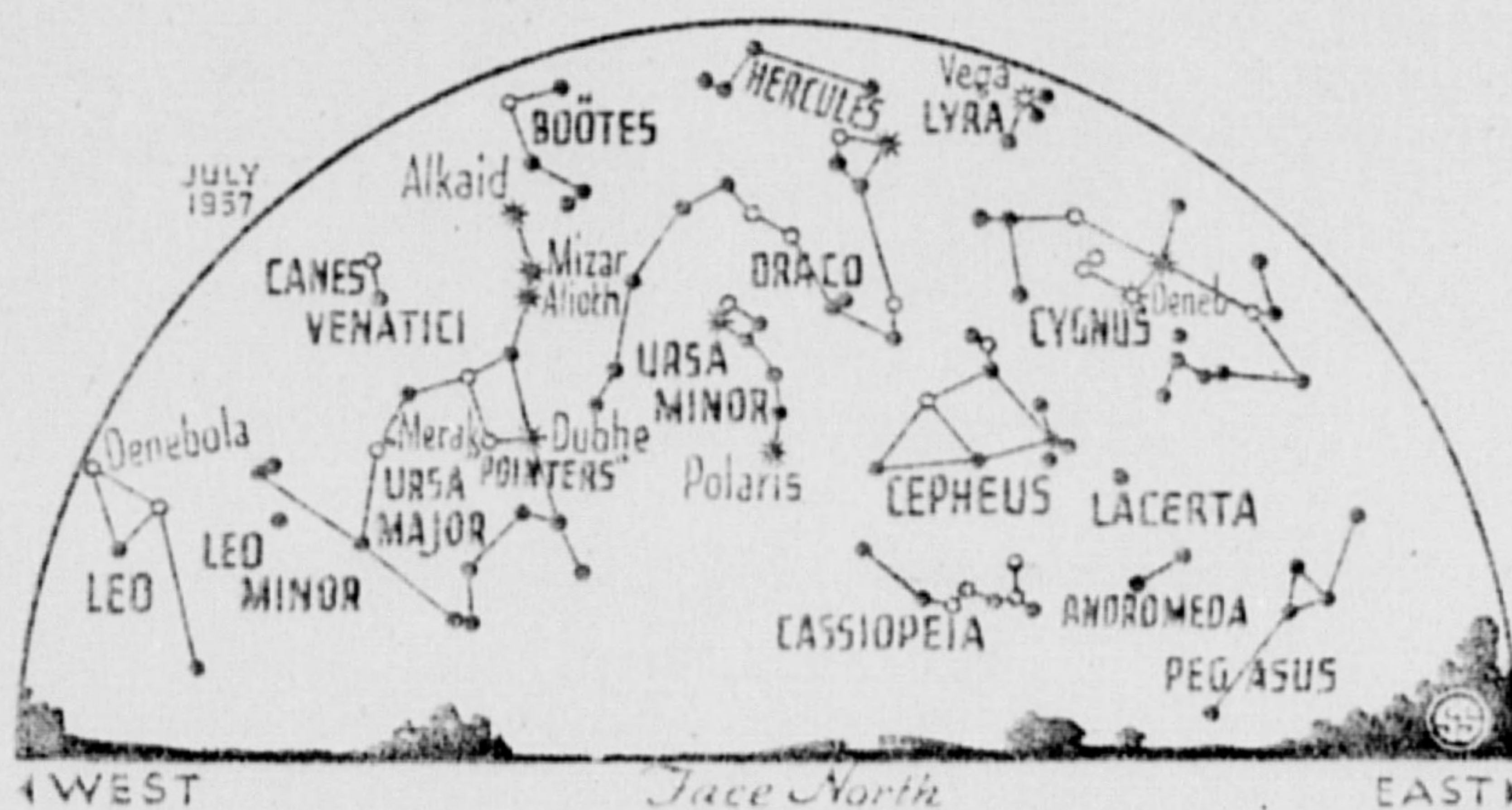
Vega itself is relatively near. It is so distant that its light—traveling 186,000 miles every second—takes about 23 years to reach us. Many stars are hundreds, or even thousands, of light years away.

Double-Double Star

Close to Vega, in the general direction of Deneb, the bright star in the nearby constellation of Cygnus, is the star called epsilon Lyrae.

This is rather faint, of the fifth magnitude, which is not far above the faintest that can be seen with the naked eye. But if your eyesight is keen, you will be able to see this is not one, but two stars. If you are unable to see them with the unaided eye, look with a pair of binoculars. Better still is the view through a small telescope. Then each member of the naked eye pair itself is shown to be a pair. Thus, this star is often called the double-double.

Going from Vega towards Altair, you come to two other stars, delta and zeta Lyrae, and a little farther to two more, about as far apart but a little brighter, beta and gamma Lyrae. These four form a little parallelogram. Between beta and gamma there is located the ring nebula of Lyra.



23 July 1957
Kirkwood, Missouri

SOURCE: FLYING SAULER - MAI 58

Last July 23, (1957) as two friends and myself were walking toward the drugstore, we saw something which is still unexplained. We were walking along (about 9:30 P.M.) when someone happen to notice a very bright star just above the horizon. We noticed nothing unusual about this until it began to move at a terrific speed. However it moved only a short distance. It would then stop and begin to go through a series of color changes. It didn't seem to be too high, but it appeared to be at some distance. The thing, (whatever it was), continued to move about and change colors for several minutes. It then disappeared behind a grove of trees.

Thinking it might have been some type of new aircraft, we checked with the airport. They reported there were no aircraft anywhere near that position at the time we saw it.

Douglas Soebbing
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Kirkwood 22, Missouri