

that the occultation will take place where you are. The moon will be in a gibbous phase, three days after first quarter. Since the dark edge of the moon is the one away from the sun, and since the moon moves through the sky from west to east, it is the dark limb that is ahead.

Consequently, the star disappears behind the moon's invisible edge, and does so instantaneously, because of the fact that the moon has no appreciable atmosphere. This makes it particularly interesting to watch. When it reappears, it comes out from behind the moon's sunlit limb, and with the glare it may be a bit difficult to see. A pair of binoculars will be a help, however.

Astronomers are particularly interested in observing occultations and timing them accurately, because they make it possible to check up on the moon's motion. It might seem easy to predict the wanderings of the moon for years to come, but to do it with great precision is one of astronomy's most difficult problems, because the moon is pulled by so many different bodies. Consequently, these calculations have to be checked from time to time and occultations, not only of bright stars, but of fainter ones as well, offer an excellent opportunity of doing so.

Celestial Time Table for January

| Jan. | EWT | |
|--|-----------|---------------------------------|
| 2 | 1:00 a.m. | Earth nearest sun; distance |
| | | 91,447,000 miles. |
| 4 | 6:06 a.m. | Moon passes Mars. |
| 6 | 8:00 a.m. | Moon nearest, distance 221,600 |
| | | miles. |
| | 8:37 a.m. | New moon. |
| 7 | 6:58 a.m. | Moon passes Venus. |
| | 6:00 p.m. | Moon passes Mercury. |
| 8 | 5:00 p.m. | Mercury farthest east of sun. |
| 13 | 3:48 a.m. | Moon in first quarter. |
| 16 | 3:23 p.m. | Moon passes Saturn. |
| | Evening | Occultation of Aldebaran; see |
| | | text. |
| 19 | 7:00 p.m. | Moon farthest, distance 252,510 |
| | | miles. |
| 20 | 8:19 a.m. | Moon passes Jupiter. |
| 21 | 6:48 a.m. | Full moon. |
| 29 | 4:13 a.m. | Moon in last quarter. |
| Subtract one hour for CWT, two hours for | | |
| MWT, and three for PWT. | | |
| | | News Letter, December 26, 1942 |
| Detence Ivens Better, Detentuer 20, 1342 | | |

NUTRITION

"Oranges for Victory"

➤ "ORANGES FOR VICTORY" might be adopted as a new slogan by citrus fruit growers and nutritionists after reading the eight military uses of vitamin C including treatment of T.N.T. poisoning reported by Dr. Harry N. Holmes, of Oberlin College (Science, Oct. 23).

Vitamin C, or ascorbic acid, of course, is found in many other fruits and vegetables besides oranges, and is also made synthetically. Annual output in the United States of the synthetic ascorbic acid may soon reach 100 tons, with our allies getting much of this, Dr. Holmes reports.

Latest military use for ascorbic acid is in treatment of T.N.T. poisoning. The physician in charge of a T.N.T. plant in Britain has reported confidentially to Dr. Holmes that tests have convinced him that T.N.T. destroys vitamin C and that he has successfully treated 57 cases of severe poisoning with rapid response to treatment. A number of T.N.T. plants in this country are now following Dr. Holmes' advice to give daily doses of vitamin C to their workers to prevent poisoning. Results have not yet been reported.

Poisoning due to tetryl used as booster charge in shells is now causing medical concern. Dr. Holmes suggests tests to determine whether workers exposed to tetryl have lowered amounts of vitamin C in their bodies. If so, daily doses of the vitamin should be given, Dr. Holmes advises.

The zinc oxide fume given off when brass is melted is causing symptoms somewhat reminiscent of lead poisoning which, Dr. Holmes states, suggests that vitamin C in the workers' bodies is being destroyed. He and Dr. Kathryn Campbell some years ago found that dust of lead and its compounds destroyed vitamin C in the bodies of workers and that daily doses of this vitamin in most instances resulted in great improvement in health.

Value of vitamin C in preventing heat prostration, to which soldiers in the tropics and North Africa as well as war industry workers are exposed, has already been reported.

Shock fom injury and surgical operations, allergic shock as in hay fever patients, and benzene and toluene poisoning are other military and war industry conditions that might be effectively warded off by vitamin C.

The vitamin plays a part in promoting healing of wounds, lessens some of the uncomfortable effects of arsenical treatment of syphilis and has recently given good results in treatment of insomnia. This last use of the vitamin mentioned by Dr. Holmes as of military value was reported by Dr. Louis J. Karnosh of Western Reserve Medical School.

Science News Letter, December 26, 1942

MEDICINE

Frequent Short Vacations Advised for Test Pilots

TEST PILOTS should be given frequent short vacations with at least one week of rest in each seven weeks, to prevent chronic exhaustion, Dr. Jan H. Tillisch and Dr. Maurice N. Walsh, of Rochester, Minn., urge in a report to War Medicine (Dec. 4), published by the American Medical Association in cooperation with the Division of Medical Sciences of the National Research Council.

Chronic exhaustion occurs more often in test pilots than in transport pilots, these doctors discovered, a finding which they point out is not surprising in view of the nature of the test pilot's work.

Most common symptoms of chronic exhaustion in the test pilot are: chronic fatigue, a feeling of inward tension and