

postpaid

25¢ Brings our products builetin

HARRY ROSS

Scientific & Lab Apparatus
61-L Reade St., N.Y. 7, N.Y.

LIVE! micro-ZOO

FASCINATING NEW KIT provides thousands of specimens of live tropical protozoans for low-power microscopes. Just add water. micro-ZOO grows in hours in a paper cup—lasts for weeks! Kit contains selected species of hydroponically grown encysted protozoans, food, and decelerator for slow motion study. \$1.00. At your Science Museum, or direct from micro-ZOO, Dept. S, Box 334, South Miami, Florida.





With artificial satellites already launched and space travel almost a reality, astronomy has become today's fastest growing hobby. Exploring the skies with a telescope is a relaxing diversion for father and son alike. UNITRON's handbook contains full-page illustrated articles on astronomy, observing, telescopes and accessories. It is of interest to both beginners and advanced amateurs.

CONTENTS INCLUDE:

Observing the sun, moon, planets and wonders of the sky • Constellation map • Hints for observers • Glossary of telescope terms • How to choose a telescope • Astropholography

INSTRU	NITRON MENT COMPANY - TELESCOPE SALES DIV. MAM ST., NEWTON HIGHLANDS 61, MASS.
	ease rush to me, FREE of charge, 'S OBSERVER'S GUIDE and TELESCOPE CATALOG #5U
Name	
Street	
City	State

SPACE

Russia In on Echo II Satellite Now in Orbit

➤ A SECOND ECHO communications satellite is now brightly visible in the sky.

The Soviet Union told the United States that it is for the first time taking part in space communications experiments using the Echo balloon. This action carries out the agreement made last summer by Dr. Hugh Dryden, deputy administrator of the National Aeronautics and Space Administration, and Dr. Anatoly A. Blagonravov of the Academy of Sciences of the USSR.

NASA hurled the reflecting balloon, 135 feet in diameter, into a near polar orbit with an apogee of 816 miles. Launch was from Vandenberg Air Force Base, Pacific Missile Range, Calif., on Jan. 25. The satellite, visible from all parts of the world at some time or another, orbits the earth every hour and 49 minutes.

The balloon, made of Mylar plastic coated on each side with aluminum foil, was partially inflated with air, then expanded fully as a chemical inside Echo changed into a gas. However, the passive communications satellite is designed to remain rigid even after all the gas has escaped, in order to see whether it will stay spherical as long as it is in orbit.

The satellite has been used to reflect radio waves between any two stations from which it is visible at the same time. It also is being used to gather information about space conditions.

• Science News Letter, 85:94 Feb. 8, 1964



MICRO-ADS

Equipment, supplies and services of special interest to scientists, science teachers and students, science-minded laymen and hobbyists. 25¢ per word, payable in advance. Closing date 3 weeks prior to publication (Saturday). SNL, 1719 N St., N.W., Washington, D.C. 20036

THE AMERICAN HUMANIST ASSOCIATION needs the commitment of those who can suggest rational solutions to modern ethical problems. Literature on request. Humanist House, Dept. SNL-2, Yellow Springs, Ohio.

BINDERS FOR SNL—BUFF-COLORED BUCK-ram. Snap-in metal strips hold 52 copies. \$4.00 pp. Send order with remittance to Science News Letter, 1719 N Street, N.W., Washington, D. C. 20036.

EXERCISE WITHOUT MOVING! DO TEN 2-SECond isometric exercises. Write Minute-A-Day, Dept. 5, 37 Centuck Station, Yonkers, N. Y. 10710.

GOVERNMENT SURPLUS RADIOS, AIRCRAFT cameras, lenses, snooperscopes, 50 page illustrated catalog 10¢. Meshna, Nahant, Mass.

GROW, STUDY, FASCINATING INSECT-EATING plants, Amazing Venus's Fly Traps, 3 large quality bulbs \$1.50, 6.82, 95, Carnivorous Plant Set, 3 Fly Trap Bulbs, 1 Ministure Huntsman's Horn, 1 Purpurea Pitcher, \$3.95 ppd. Illustrated brochure 10, 127-5, Basking

LIVE SEAHORSES, MARINE SPECIMENS, aquarium supplies. Illustrated catalog 10¢. Marine Life, Dept. 109, P. O. Box 626, Dania, Florida.



G. T. Schjeldahl

ECHO II—The Echo II "Satelloon" is shown during static inflation tests at Lakehurst, N. J. About 45 tons of air are required to inflate the 1.3 million-cubic-foot volume of the huge sphere developed by the G. T. Schjeldahl Company, Northfield, Minn., for NASA's Goddard Space Flight Center.

EDUCATION

Training of African Educators Continues

➤ IN ANSWER to a demand for professionally qualified educators by the new nations of Africa, a joint Afro-Anglo-American program in teacher education will be continued through 1964-65.

Teachers holding at least a Bachelor's degree will study half a year at Teachers College, Columbia University, New York, and a half year at the University of London Institute of Education. Emphasis at the London Institute is placed on African educational situations, English educational ideas and practice, and methods of instruction in African schools.

Science News Letter, 85:94 Feb. 8, 1964

Science Aptitude Exam Answers

To check yourself, score one point for each entirely correct answer.

PART A: 5-2; 6-1, 2, 3, 4; 7-1, 2, 3; 8-2; 9-4; 31-2; 32-2; 33-3; 34-2, 3, 4; 35-2; 36—2.

PART B: 73—4; 74—2; 75—3; 87—2; 88—1; 89—4; 90—3.

For a complete aptitude examination, send 15¢ in coins to Science Clubs of America, 1719 N St., N.W., Washington, D. C. 20036 and ask for the test. Or send one dollar for eight different tests, which will include this year's examination.

• Science News Letter, 85:94 Feb. 8, 1964