# Science

ience Service Publication 106/July 6, 1974/No. 1 porating Science News Letter

### Of the Week

Science and Government Contributions of Vannevar Bush New advance in gene therapy Birth control and teenagers Investigating the atmosphere Pesticides in tidal regions Decline of science education

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COVER: Flood-damaged airplanes are being deliberately crashed from the old Lunar Module drop-test rack (1) at NASA's Langley Research Center to study the survivability of general aviation aircraft. Swung down on cables (2) to vary the crash angle and speed, the planes hit nose first (3), but early tests have shown a major second impact when the fuselage drops down behind (4 and 5). Long skids (6) add abrasion. (Photos: NASA)

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## To the Editor

#### Sickle-cell coverage

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Your publication is the highlight of the week to me.

I've never had occasion to criticize anything in Science News that's in my particular interest. I do, however, have a question now on completeness of coverage. The subject is sickle-cell anemia. The detective story is incomplete and deserves more coverage due in fairness to those suffering from the disease.

In the letter written by Robert M. Nalbandian, M.D., ("Out of the swirling controversy," SN: 6/8/74, p. 363) compliments are extended for clarification of cyanate research results. May I suggest, for the interest of the sufferer, that coverage of nutritional research be reported as it appears in the Nov. 26, 1973 AMER-ICAN JOURNAL OF CLINICAL NUTRITION in an article by Robert G. Houston.

Genetically the sickle-cell trait gives protection against malaria. The African groups therefore find it beneficial. But! there is very little sickle-cell anemia in Africa. Houston successfully relates this to the cyanate content of the ethnic diet (yams, sorghum, millet and cassava) which provides the African with upwards of 1,000 milligrams of cyanate per day. The U.S. diet contains only 25 milligrams.

The masterful pen of Joan Arehart-Treichel would be perfect to close out this picture.

> Gerald W. Clarke Oxnard, Calif.

#### It's a lopsided world

A note on "The mystery of the hemispheres" (SN: 4/13/74, p. 241) calls attention to the apparent replication of an asymmetry, or one-sided roughness, previously noted for the Moon and now seen on Mars and Mercury as a result of Mariner data.

It may be worth noting that, in terms of land and sea distribution-and therefore geologic phenomena—the earth is also quite asymmetrical. Viewed from a spacecraft in synchronous orbit over coordinates 10°S., 160°W. the earth would appear as a hemisphere almost entirely covered by water.

In earlier stages of continental drift this land/sea asymmetry would have appeared even more pronounced.

Ronald Davis Asst. Prof. of History Western Michigan University Kalamazoo, Mich.

#### For metrication

As a science magazine, I wish (if not advise) you would completely discontinue using the English unit system and use only the metric or SI system. The faster we get out of the English system, the better. We cannot do that if you and others maintain the habit of giving units in the English system.

I believe, though I don't know if it can be proven or disproven, that America would be at least 5 years ahead of its time today in science and technology if it had started with the metric system when it became available.

> Ernest Cruzen Chemical Engineer Eureka Co. Bloomington, Ill.

(We would like to be all metric, but many of our sources quote English units. Conversion is messy and raises the question which are exact and which round numbers. There is an apocryphal tale from the early days of NASA an agency long hooked on English units: A bureaucratic type repeatedly bedeviled the celestial mechanicians to give him orbital data in English units. Finally they did. They recorded the velocity of a satellite in furlongs per fortnight.—Ed.)

#### Good job on Pluto

I was particularly impressed by the excellent job done by Science News in summarizing my article on a possible neon atmosphere for Pluto (SN: 6/1/74, p. 353).

I have noticed that many newspapers and magazines, in attempting to condense an article, oversimplify it to the point of gross distortion. I was therefore pleasantly surprised to see how accurately my paper was reported. Keep up the good work.

Michael H. Hart Hale Observatories Pasadena, Calif.

#### The Forest, not the Park, Service

Science News seems to be perpetuating an unfortunate error regarding the alleged use of D.D.T. by the National Park Service to control tussock moths in the Pacific Northwest (SN: 3/30/74, p. 209, 6/8/ 74 p. 370).

In fact, it is not the U.S. Department of Interior, National Park Service, that contemplates this action but the U.S. Department of Agriculture, U.S. Forest Service. Milford R. Fletcher, Ph.D.

**Ecologist** United States Department of the Interior National Park Service

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