# SIEKE NEVS

The Weekly Newsmagazine of Science

A Science Service Publication Volume 123, No. 6, February 5, 1983

E.G. Sherburne Jr. Publisher Joel Greenberg Editor Dietrick E. Thomsen Senior Editor/ Physical Sciences Judy Klein Assistant Editor Wray Herbert **Behavioral Sciences** Joan Arehart-Treichel Biomedicine Linda Garmon Chemistry Cheryl Simon Earth Sciences Julie Ann Miller Life Sciences Janet Raioff. Policy/Technology Jonathan Eberhart Space Sciences Joanne Silberner Assistant to the Editor lleana Mendez Art Director

Jane M. Livermore Books
Donald R. Harless Business Manager
Scherago Associates Advertising
Fred Dieffenbach, Sales Director
1515 Broadway, New York, N.Y. 10036

Science Writer Intern

Allan Chen

Copyright \* 1983 by Science Service, Inc., Editorial and Business Offices, 1719 N.St., N.W., Washington, D.C. 20036. Republication of any portion of SCIENCE NEWS without written permission of the publisher is prohibited.

Subscription Department 231 West Center Street, Marion, Ohio 43302

Subscription rate: 1 yr., \$27.50; 2 yrs., \$47.50; 3 yrs., \$67.00. (Foreign postage \$5.00 additional per year.) Change of address: Four to six weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code. For new subscriptions only call (1) 800-247-2160. Printed in U.S.A. Second class postage paid at Washington, D.C. Title registered as trademark U.S. and Canadian Patent Offices. Published every Saturday by SCIENCE SERVICE, Inc. 1719 N St., N.W., Washington, D.C. 20036. (202-785-2255) ISSN 0036-8423

#### This Week

84	W Particle, Physics Missing Link, Found
85	Decay-resistant protons in Ohio
85	IR satellite is up and looking
85	Microorganism suspect in pregnancy disease
86	1984 Budget — Physically better but biologically slow
86	National Science Foundation — Bolstering a frayed foundation
86	Space — NASA: Signs of change?
87	Biomedicine & Behavior — NIH, NIMH: Holding the lid
87	Earth Sciences — A slower flow of funds
87	All Other — Some deep plunges
87	Energy — High-tech energy funds increase

#### **Research Notes**

90	Computers
90	Earth Sciences
91	Technology
91	Space Sciences

#### **Articles**

88 Lucy's Uncommon Forebear

Cover: Pygmy chimpanzees, which live only in an isolated jungle region of central Africa, have until recently been studied exclusively in captivity. Now, studies in the wild have yielded intriguing behavioral data and rekindled a debate about early hominid evolution. (Photograph by Noel Badrian)

93 Europe's Choice: Where Next in Space?



#### **Departments**

83 Letters

Science Service Institution for the public understanding of science founded 1921; a nonprofit corporation.

Board of Trustees — President, Glenn T. Seaborg; Vice President, Gerald F. Tape; Treasurer, Milton Harris; Secretary, Julius Duscha; Joseph W. Berg Jr.; Edward Bliss Jr.; Bowen C. Dees; David A. Goslin; Hilleary F. Hoskinson; Elizabeth F. Neufeld; O.W. Riegel; Willis Harlow Shapley; H. Guyford Stever; John Troan; Deborah P. Wolfe

Director: E. G. Sherburne Jr.; Assistant Director: Dorothy Schriver; Business Manager: Donald R. Harless.

#### Letters

#### **Intelligence: The 4 Rs**

Shades of Lysenko in the USSR under Stalin. When the data don't fit the dream, change the tests ("Intelligence Test: Sizing Up A Newcomer," SN: 10/30/82, p. 280)!

Seriously, since modern civilizations are dependent on the written word and mathematics, any tests which ignore or attempt to minimize these subjects are doomed to triviality.

Perhaps we need to explicitly define "intelligence" as the 4 Rs: readin', 'ritin', 'rithmetic, reasonin'.

M. F. Thorne Pacific Palisades, Calif.

#### Mixed-up supernovae

In his story on plans for the MIRA extragalactic supernova patrol ("1054 and All That," SN: 1/15/83, p. 44), Mr. Thomsen has mixed up his historical supernovae. The one that occurred in the year 1006 was (according to Clark and Stephenson) extremely brilliant, observed in many parts of the world, including medieval Europe—no need for retrospective conjectures

— and was located in the southern constellation Lupus.

The one that gave rise to the radio source Cas A is thought to have occurred late in the 17th century. Recently it has been suggested that it was seen as a 6th-magnitude object by Flamsteed, who marked such a star on his atlas in the vicinity of Cas A, where no star is visible today. Mr. Thomsen may wish to refer to his short note on this matter (SN: 1/26/80, p. 56).

R. S. Freitag Arlington, Va.

#### It already exists

Referring to Dietrick E. Thomsen's second article on monopoles (SN: 12/4/82, p. 362), there is reference to a proposed experiment by Barry C. Barish which would involve spending about \$5 million for a football field covered with aluminum sheet.

In the article, Mr. Barish proposes that an acoustic transducer could be attached to the edge of such an array with a chance of catching a monopole.

Please inform Mr. Barish that there is a possibility this \$5 million need not be spent to do the experiment. Such a field already indeed exists and is used as the ground plane for the Big Ear Radio telescope in Delaware, Ohio.

Robert M. Sickels Fort Pierce, Fla.

## **Copies Missing?**

Keep your files of Science News complete and up-to-date. Any missing issue from the past two years may be ordered by sending \$1.00 per copy (\$1.50 for issues older than 1 year) to:

Back Orders

### **Science News**

1719 N Street, N.W. Washington, D.C. 20036

FEBRUARY 5, 1983 83