GENERAL SCIENCE

## Teen Science Brain Force

The increasing number of science-motivated teen-agers in more than 30 countries will provide a powerful force for scientific growth when they join research ranks.

➤ A RAPIDLY GROWING FORCE of teen scientists in more than 30 nations stands as a "powerful and important ingredient" in the ever expanding science technology "brain force" that will continually remake our civilization.

So stated Dr. Watson Davis, Director, Science Service, to the American Association for the Advancement of Science meeting in Montreal.

In the United States alone, Dr. Davis said, there are approximately one million science-oriented boys and girls in high school.

"A few of them are recognizably of great talent and promise," he said. "They are viewing the world with fresh but enlightened minds that will give advanced knowledge of facts and theories when they join the research ranks."

Science-motivated students in high school are the rank and file of the "great national science youth program," Dr. Davis said. They do science projects and show them in science fairs in some 15,000 schools. Their science teachers, some 20,000 of them, are sponsors of the Science Clubs of America units in practically all localities of the nation.

The teachers provide "continuing inspiration to encourage the young scientists who undertake projects, often amazingly expert and predictive of what the student is likely to do in the future."

Dr. Davis also discussed the "course content revisions revolution" which recognizes the necessity for "infusion of the experimental method into education." He said that the "growth of these efforts to change science courses in the United States is an outcome of the success of what might be called the science project or the science fair method of interesting the young in 'playing science' actively, instead of sitting on the sidelines while teachers pontificate in lectures, goodhearted and competent though they may be."

The speaker also saw "great promise" for the overall development of science in exporting these methods to other countries. "A great opportunity," he said "exists in every area where educational facilities are being created to introduce the new methods."

He warned, however, that "science education suitable to a country cannot be imported like an automobile ready to run. It must be assembled and in some cases manufactured to meet the particular conditions."

In this connection, Dr. Davis cited the opportunity afforded Science Service to introduce science fairs and science clubs in other nations to help meet the science education needs peculiar to the various localities. He praised the "wise support of the

Atomic Energy Commission in making it possible for Science Service to cooperate with ministries of education in sponsoring science fairs in Mexico, Chile, Colombia, Uruguay and Spain, with fairs to be held in Portugal, El Salvador and Guatemala in 1965

The National Science Fair, which was first held in 1950 in Philadelphia, became international in 1958 when Japan expressed a desire to enter. Since then there have been entries from Canada, Thailand, Sweden and from U.S. Dependents' Schools in Germany, France and Italy. Israel will participate in 1965, while Ireland may also be represented. The 1965 Fair will be held in St. Louis, May 5-8.

## **Discover New Supernova**

➤ A SUPER-BRIGHT STAR blazed forth in the heavens 958 years ago, records only now discovered show.

The supernova of 1006 faded after shining for about three and a half months with a brilliance considerably greater than the planet Venus.

The extraordinary event was revealed in records now available from Morocco and Japan, Dr. Bernard R. Goldstein of Yale University reported to a joint meeting of the American Astronomical Society and the

American Association for the Advancement of Science meeting.

The supernova was visible starting about May 1, 1006. It was in the constellation of Lupus, the wolf, which is a star grouping visible low in the south during spring months. The bright object was not a comet, Dr. Goldstein said, and its brilliance did not vary much during the more than three months it was blazing.

Another famous supernova of that century occurred on July 4, 1054, leaving the remnants now known as the Crab Nebula.

A supernova results when a star suddenly explodes, increasing its light and other energy outpouring many billions of times. A large fraction of the star is blasted into interstellar space, leaving behind a star that may be a white dwarf.

## **Mature Thinking Disturbs**

➤ BLAME THE MATURE THINKING of our modern life, not the primitive drive for food, sex, and physical survival, for some of the mental illness and psychological difficulties that beset us these days.

These are increasing, not decreasing, under present conditions.

"The most important emotional factors which motivate or disturb men are those which are sustained or actually engendered by complicated conceptual thought processes," Prof. Silvano Arieti, professor of clinical psychiatry, New York Medical College, told the American Association for the Advancement of Science annual meeting.

Such conditions as severe anxiety reactions, schizophrenia and paranoid states, have very little to do with hunger, thirst, sex, as such, but very much to do with the complicated conceptual world of man.

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Food and Agriculture Organization

COWS AFLOAT—When the yearly rains flood the coastal plains of southern Dahomey in Africa, these pure-bred Laguna cattle are put on straw rafts to avoid drowning. After almost three months afloat, most of them are emaciated, parasite-ridden and too weak to stand.